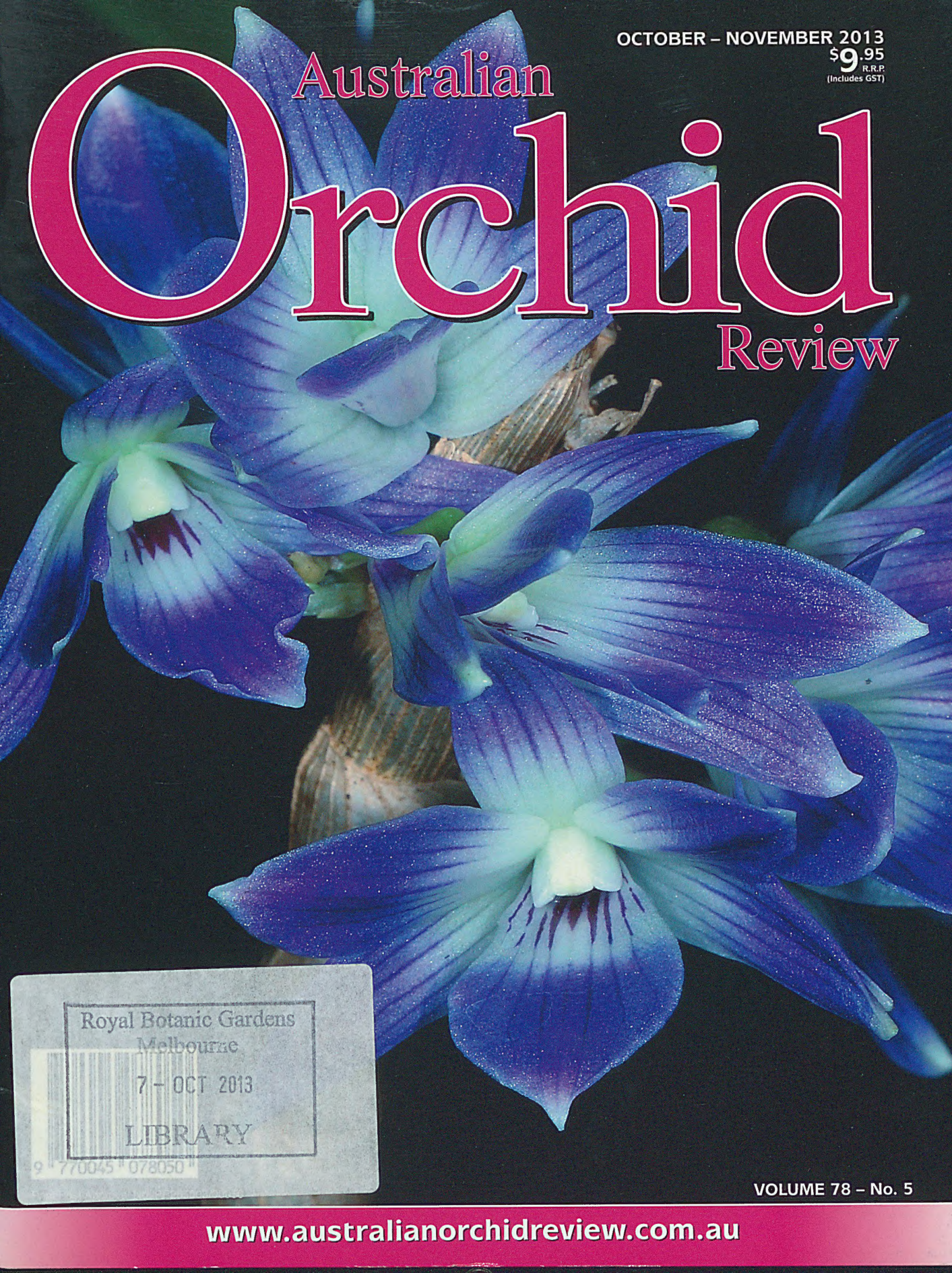


OCTOBER – NOVEMBER 2013
$9.95 R.R.P. (Includes GST)

Australian Orchid Review

Royal Botanic Gardens
Melbourne
7 - OCT 2013
LIBRARY
9 770045 078050

VOLUME 78 – No. 5

www.australianorchidreview.com.au

HILLS DISTRICT ORCHIDS

Summer Open Day Sunday 1 December 2013

@183 Windsor Road Northmead 2152 NSW

9am til 4pm (please park in Mary Street or Windermere Avenue)

Heaps of flowering orchids, rare species and unusual plants for sale, as well as a full range of orchid related supplies and new and exclusive Clivia miniata seedlings in a full range of colours.

also attending:
Tinonee Orchid Nursery, Macquarie Native Orchids and Dark Star Orchids

Phone: David Banks on (02) 9674 4720 or 0412 123 036
E-mail: david@hillsdistrictorchids.com

HDO Open Days are held 4 times a year:

Autumn: Last Sunday in February (23 February 2014)
Winter: Last Sunday in July [with Easy Orchids] (27 July 2014)
Spring: Last Sunday in September (28 September 2014)
Summer: First Sunday in December [with Dark Star Orchids] (1 December 2013)

www.hillsdistrictorchids.com

AOR 000

From the Editor's Desk

The genus *Dendrobium* is undergoing continued taxonomic upheaval at the moment. I believe many orchid growers and researchers are after some sort of stability and consistency. We see members of the Pleurothallidinae, Laeliinae and Oncidiinae readily get split up into a plethora of splinter genera that seem to get instant universal acceptance, yet there is enormous resistance to touching popular botanical and horticultural genera such as *Dendrobium* and *Bulbophyllum*. As I said earlier, we need some kind of transparency and consistency. I can't help but believe that a lot of this is determined by who is funding the research, where it is being undertaken plus the individuals that are pushing various agendas.

On the *Dendrobium* theme, Jim Cootes with George Tiong discuss the Philippine species from Section *Calcarifera*. Many of these splendid plants are entrenched in cultivation, yet different colour forms are turning up from new collections from new localities. John Varigos (from the Orchid Species Society of Victoria) supplied the outstanding image that we used on this issues front cover. They also describe a new species of Jewel Orchid.

Clive Halls from Mt Beenak Orchids in Victoria has arguably done more to put Masdevallias on the map in Australia than any other individual. Clive's Masdevallias are world class, and at the recent St Ives Orchid Fair and Show, he was awarded three First Class Certificates for locally produced hybrids. This is an outstanding achievement, and he also gained two Award of Merits. Many who saw these plants marvelled at their superior and this, thankfully, was reflected in the awards bestowed by the OSNSW Judging Panel. Congratulations Clive! He loves talking all things orchids and is always willing to share information and give sound cultural advice. In this issue, Clive discusses the breeding backgrounds and history of his recently awarded trio. Plus we have the photos as well!

I introduce an unusual new colour form of the Australian species *Dendrobium adae*. This orchid has the best fragrance in my opinion. Peter Meyer talks about a recent orchid trek to Laos.

Rudolf Jenny discusses the colourful history surrounding three *Acineta* species from Mexico. This small genus of orchids is closely related to *Stanhopea*. You can tell that Rudolf enjoys researching the history and the lives of those who played a part in discovering and naming these unique orchids.

David Jones with Chris French describes another new species of Donkey Orchid from Western Australia, from the genus *Diuris*.

Alan Stephenson ponders the future of many Australian native orchids in their habitat, with the bending of the rules of many government departments at both a state and federal level. Orchids don't receive the same attention as "cuddly" creatures like koalas, but are just as important to the biodiversity of a region. At the recent Australasian Native Orchid Conference, Alan was bestowed with Life Membership, which is a great privilege and honour, and one thoroughly deserved for his work over many years as the ANOS Conservation Officer. He remains the Conservation Director for the Australian Orchid Council. ■

David Banks
Australian Orchid Review
david@hillsdistrictorchids.com

OCTOBER – NOVEMBER 2013
Volume 78 – No. 5

Contents

Features:

Dendrobium Section *Calcarifera* Species from the Philippines ..... *Jim Cootes and George Tiong* 2

Three New FCC's for New *Masdevallia* Hybrids ..... *Clive Halls* 24

Unusual Colour Form of *Dendrobium adae* ..... *David Banks* 28

My Orchid Trek in Laos ..... *Peter Meyer* 34

The sister-trio from Mexico: *Acineta barkeri*, *Acineta hagsateri* and *Acineta salazari* ..... *Rudolf Jenny* 37

Diuris hazeliae, a colourful new species in the *Diuris corymbosa* complex from inland areas of Western Australia ..... *David L. Jones and Christopher J. French* 47

The Devaluation of the Environment Portfolio in New South Wales ..... *Alan W. Stephenson* 54

A New Terrestrial Species of Orchidaceae from the Philippines ..... *Jim Cootes and George Tiong* 56

Royal Botanic Gardens Melbourne
7 OCT 2013
LIBRARY

Regular Features:

From the Editor's Desk 1

Mail Order Bookshop 59

Advertiser's Index 64

Editorial copy:
Articles for publication and consideration should be sent to:
AOR Editor, David P. Banks, 39 Carole Street, Seven Hills, NSW 2147
Email: david@hillsdistrictorchids.com

All other correspondence to:
AOR Publisher, Hills Orchid Publishing Pty Ltd, PO Box 4812, North Rocks, NSW 2151
☎ 0433 422 792

Advertisers:
Deadline for advertising copy for the December 2013 – January 2014 issue is Monday, 21 October, 2013
All advertising bookings and enquiries should be directed to:
Caitlin Hoolahan ☎ 0433 422 792 Fax: (02) 9221 4242 or
Email: sales@australianorchidreview.com.au or
David Banks ☎ 0412 123 036 Email: david@hillsdistrictorchids.com

Subscriptions:
See page 61 for Subscription information

Cover Shot

Dendrobium victoriae-reginae is the stunning regal blue-flowered *Dendrobium* species from the mountainous cloud forests of the Philippines.

Photo: John Varigos

Dendrobium Section *Calcarifera* Species from the Philippines

by Jim Cootes and George Tiong

Dendrobium amethystoglossum **– typical colour form**

Dendrobium amethystoglossum – greenish form

Dendrobium amethystoglossum – albino/white form (photo: Wally Suarez)

Members of the genus *Dendrobium* are some of the most popular of all horticultural subjects. Many of the species are easy to grow, either in pots or on mounts. Plants can come in all sizes, from as small as a grain of wheat (such as *Dendrobium toressae*) to monster plants, of several metres in length (*Dendrobium discolor* or *Dendrobium violaceoflavens*).

The subjects for this article are of modest dimensions, and the only species which can get large is *Dendrobium fairchildiae*, where the pseudobulbs can get to about 1.5 metres in length. All the other species mentioned here would seldom be more than 70 cm in height.

Johannes J. Smith established the Section *Calcarifera* in 1908, which he had separated from Section *Pedilonum*. The main characters that distinguish the section are: the labellum is abruptly broadened from a narrow claw, while the mentum points away from the pedicel and ovary (suggesting pollination by insects). In most members, the pseudobulbs are slim or spindle-shaped and are often pendulous, with thin-textured leaves along the stem which become deciduous after a year or two. The inflorescence usually appears from the older leafless pseudobulb, with the flowers encircling the inflorescence and facing more or less horizontally.

The Section *Calcarifera* has over 90 species. The centre of distribution is in Sumatra, which has about 29 species; next is Borneo with 22 species; Peninsular Malaysia with 17 species; and then the Philippines with at least 15 species, but we are aware of a further three new taxa awaiting to be scientifically described. These are mostly plants of humid tropical forests, which experience year-round rainfall, and are found at low to moderate altitudes (sea level to above 1500 m).

Philippine species:

Dendrobium amethystoglossum Reichenbach *f.*, is one of the most beautiful species endemic to the Philippines, with a robust upright growth habit, where the pseudobulbs reach 90 cm in height and almost 2 cm in diameter. The inflorescence, which appears from the leafless pseudobulb, is a semi-pendulous raceme carrying up to 20 fragrant flowers. Each flower measures about 3 cm across, with the colour being generally white, and the labellum amethyst purple. A pure white form of this species is also known. This epiphyte occurs in the mountains of northern Luzon (at altitudes of about 1500 m), and in Mindoro, which experience intermediate temperatures and year-round humidity.

Dendrobium boosii Cootes and Suarez, is a recently discovered species, being only described in 2011, and has a limited distribution in the mountains of the island of Leyte. The plant grows pendulously, from a single basal growth, branching as the plant becomes older and can reach up to 70 cm in length. The blooms are most attractive in their colouration, in shades ranging from pale pink to pure white. The serrated edge of the colourful labellum is another attractive feature of this species.

Dendrobium boosii **– typical form** ***(photo: Ronny Boos)***

Dendrobium boosii **– white form** ***(photo: Ronny Boos)***

Dendrobium ceraula **– typical form**

Dendrobium ceraula Reichenbach *f.*, is more commonly known and grown as *D. gonzalesii* Quisumbing, but the latter epithet cannot be used due to the rules of botanical priority. The pendulous pseudobulbs measure up to 30 cm in length, with new growths appearing from the middle of the stems as well as from the base of the plant. The colour range of the blooms is highly variable, ranging from white, to pink, to pale blue, with deep purple stripes on the labellum. The mentum is tapering and curves around towards the dorsal sepal. This species is endemic to the mountain forests of southern Luzon.

Dendrobium ceraula **– pale bicoloured form**

ORCHID, LANDSCAPING & HORTICULTURAL COURSES, DISTANCE EDUCATION

Short courses, Certificates, Diplomas

Over 400 courses including:

Cut Flower Orchids, Hydroponics, Tissue Culture, Orchid Culture, Plant Varieties, Landscaping and more

Study by CD, online, or by traditional correspondence. Highly qualified tutors.

FREE 87 page handbook

Phone: 07 5562 1088

Websites: www.acs.edu.au www.hortcourses.com

P.O. Box 2092, Nerang MDC, Qld 4211

Dendrobium ceraula
(photo: John Varigos)

Grow With Us

American Orchid Society

Beginner or expert, share your passion for orchids by becoming a member of the American Orchid Society today!

For American Orchid Society membership information and benefits, please go to www.aos.org, e-mail TheAOS@aos.org or call 305-740-2010.

Miriam Ann Orchids

Alan & Miriam Merriman
89 Levy Street,
Glenbrook NSW 2773

Sydney's only one stop Orchid Shop

We carry a full range of pest and disease control chemicals suitable for use on orchids.

The home of Merri Fert and Merri Cote. We also carry a full range of Port Pots, Debco Bark, Potting Media and all you require for your orchids.

WE ARE PLEASED TO ANNOUNCE THE RELEASE OF

Alan's Fertiliser Handbook

2nd edition now available $22 + p&p

Alan's Pest & Disease Handbook still available for $16.50 +p&p.

- Plants, seedlings of most genera in stock.
- Nursery open most weekends or by appointment.
- Closed last weekend of the month.

Please ring before coming

Ph: 02 4739 5141

Fax: 02 4749 8090 Mobile: 0439 514141
Email: mirannorchids@pnc.com.au
MASTERCARD AND VISA WELCOME

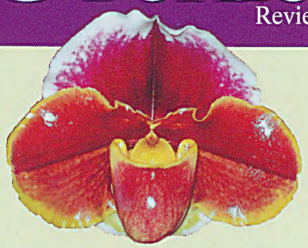
AOR 052

Dendrobium cerinum **– coloured lip form**

Dendrobium cerinum **– typical form**

Dendrobium cerinum Reichenbach *f.*, is one of the few upright growing species in the section. The attractive blooms have a waxy appearance and are coloured bright yellow. Some clones have two red blotches on the labellum.

Australian Orchid Review



WELCOMES EDITORIAL CONTRIBUTIONS

Please ensure that all slides, photographs and electronic files are clearly marked with the author's name and address

Address editorial to:

David P. Banks (Editor)
Australian Orchid Review
39 Carole Street, Seven Hills
NSW 2147 AUSTRALIA

Email:

david@hillsdistrictorchids.com

AOR 065

Dendrobium chameleon Ames, is a pendulous grower and branches frequently. In the mountains of central Luzon, this species can be found growing very close to the ground in fairly shaded locations. The white or pale yellow flowers are variously striped with either green or pinkish markings. There are also pure white forms of this species. Plants of *D. chameleon* have also been recorded from southern Taiwan.

Dendrobium chameleon – white form

Dendrobium chameleon (photo: David Titmuss)

THE Orchid pot co.

SQUARE VANDA POTS
165mm x 165mm x 80mm
100mm x 100mm x 60mm

ORCHID POTS				BASKET POTS
300mm x 120mm	175mm x 120mm	100mm x 120mm	70mm x 50mm	200mm x 130mm
250mm x 150mm	150mm x 100mm	100mm x 75mm	60mm x 70mm	140mm x 100mm
200mm x 200mm	125mm x 75mm	80mm x 100mm	50mm x 65mm	80mm x 75mm

21 Jambali Road, Port Macquarie, NSW 2444 Australia

Phone: (02) 6581 1735 **Fax: (02) 6581 1736**

Website: www.orchidpotco.com **Email: orchidpotco@bigpond.com**

AOR 001

RETINA AUSTRALIA

Retinitis pigmentosa (RP)

is the major cause of youth blindness!
If you have RP, or know someone who has, please contact the charity/support group

RETINA AUSTRALIA

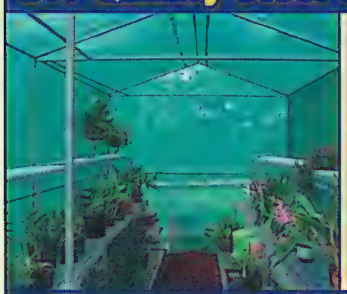
FIGHTING BLINDNESS
For information and assistance phone
1800 999 870
www.retinaAustralia.com.au

AOR 025

Dendrobium chameleon
– typical form

C-MAC Industries (Aust.)

DIY Quality Steel Shade House and Benching



- Protect orchids from extreme weather and disease
- Display your orchids to the best advantage in an ideal environment
- Considerable savings in energy, irrigation, spraying
- Kits Shipped Australia Wide - Easy to assemble and disassemble (DIY) with 3D instruction
- Custom Sizes available
  - NO ADDITIONAL SETUP
  OR EXTRA LABOUR COSTS

AUSTRALIAN MADE AND OWNED

Ph: (02) 9631 6000

Web: www.nurserybenches.com.au

ARANBEEM ORCHIDS

Mail Order Specialists

Nursery Open:
1st Saturday of Month
Other times by appointment

Phone / Mail Orders:
(07) 3888 3637 (ph)
(07) 3888 5271 (fax)
aranbeem@bigpond.net.au

Priests Road (PO Box 96)
Deception Bay
Brisbane Qld 4508

ACR 004

Dendrobium crassimarginatum

Dendrobium crassimarginatum (photo: Melanie Schori)

Dendrobium crassimarginatum L.O. Williams, is known only from Leyte, where it grows on the underside of branches in amongst mosses at elevations of about 600 m. The flowers are highly fragrant and large for this section, being about 5 cm across at the widest point.

World Wide
SPECIES ORCHIDS
Mail Order
Flasks, Seedlings, Flowering size.
Burleigh Park Orchid Nursery
54 Hammond Way, Thuringowa, 4815.
Ph 0747 740 008
Lists by mail or email:
ian@speciesorchids.com
www.speciesorchids.com
Propagators of the Rare, Beautiful and Unusual Orchid Species of the World.
Accredited CITES & Phyto Export
AOR 013

Dendrobium diffusum
(photo: Derek Cabactulan)

Dendrobium diffusum L.O. Williams, is a rarely seen species, which was only known from the type collection that was made on Mount Apo, highest mountain in the Philippines, in the late 1930s. Plants have recently come into cultivation that were originally found in the north of Mindanao in the mountains of Bukidnon province. The flowers of this beautiful species are about 2.5 cm in diameter. The picture shown here may well be the first ever published of this rare species.

Dark Star Orchids

Bulbophyllums, Dendrochilums, Lycastes,
Stanhopeas, Paphs, Africans and lots more

RARE AND UNUSUAL SPECIES
AND SOME SELECTED HYBRIDS

Please check our newly updated website for our latest releases

Hans Schaible
www.darkstarorchids.com.au

PO Box 114 Bowraville NSW 2449
Telephone/Fax (02) 6564 4088
darkstarorchids@bordernet.com.au

AOR 126

Dendrobium fairchildiae

Dendrobium fairchildiae
(photo: John Varigos)

Dendrobium fairchildiae Ames & Quisumbing, is an outstanding and large species which can be observed growing on rocks in the mountains of central Luzon, however its usual habitat is on the trunks of trees. The relatively large flowers (4 cm in diameter) are mostly white, with the tips of the segments being pale pink or purplish. The albinistic form of this species has also been described, where the flowers are pure white with some yellow in the base of the labellum. A prominent feature is the long spur, which is about 3 cm long, with the final 1 cm being bent towards the plant. It is only recorded from the mountains of central Luzon and the island of Catanduanes, which is to the east of southern Luzon.

Dendrobium fairchildiae
(photo: John Varigos)

The time is ticking by.....

If you have not booked to travel on

Easy Orchids

THE AFRICAN GRAND ORCHID SAFARI

now is the time as only limited seats are still available.

Visit South Africa, Zimbabwe and Botswana,
attend the 21st World Orchid Conference
in Johannesburg,
visit THE WORLD FAMOUS Victoria Falls and
Chobe National Park, see African game animals
in their natural habitat and more.

Contact ***Easy Orchids***
sales@easyorchids.com
or
Casino Travel Shoppe
casino.travel@bigpond.com
for all details without obligation.

ORCHIDS OF SOUTH–WEST AUSTRALIA 3rd EDITION

by N. Hoffman and A. Brown 2011

This 3rd Edition is a major revision of the 413 orchid species found in the south-west region of Western Australia. This definitive work has an extended key to the genera and includes 42 new species, a glossary, bibliography and indexes to the scientific and common names. Excellent descriptions of each orchid in which the distinctive features of each species and information on distribution, habitat, flowering period and the common name is provided.

Softcover. 520 pages.

$60.00 ***plus postage***

Visa/Mastercard accepted

AOR 021

Australian Orchid Foundation

P.O. Box 322,
Essendon North, Vic. 3041
Phone/Fax (03) 5627 6303
www.australianorchidfoundation.org.au

Dendrobium guerreroi

Dendrobium guerreroi Ames & Quisumbing, is an extremely rare species of which we have only seen the one plant. The plant was in the collection of a long-time species grower in Sydney, who was sent plants from the Philippines at different times. The recorded distribution of *D. guerreroi*, namely the island of Mindoro and the island of Dinagat to the north of Mindanao, suggests that it is widely distributed, which raises the possibility of past misidentifications. In any case, little is known about this species.

Mallee Phallies

Importing flasks from leading Asian nurseries on a regular basis

Phals, paphs, catts, oncids, dends and others

See our ranges at …

http://www.kevalloyd.com.au/malleephallies.html

Keva Lloyd, 8-12 Gallagher St., Sea Lake. Vic. 3533
Ph. 03 5070 1404 BH, 03 5070 2072 AH
Email: malleephallies@gmx.com

Dendrobium ionopus – typical form

Dendrobium ionopus – typical form

Dendrobium ionopus fma. *album* (photo: Ravan Schneider)

Dendrobium ionopus Reichenbach *f.*, is a medium-sized species with a semi-pendulous habit. The flower colour is highly variable - flowers can be bronze in colour, others are pure green, and recently a white form has been found in the islands of the central Philippines.

Dendrobium phillipsii

Dendrobium phillipsii Ames & Quisumbing, is the sister species of *D. fairchildiae*, and is relatively smaller, with pseudobulbs measuring about 60 cm long. The flower colour is predominantly white, while the spur and the throat of the labellum are yellow. The final portion of the spur points downwards towards the ground, which is one of the distinguishing features that separates this species from *D. fairchildiae*. *D. phillipsii* is only known from northern Mindanao at elevations of about 800 m.

DAVID KEANELLY ORCHIDS

CYMBIDIUMS

Mericlones & Seedlings

Mail Order Specialists Australia-wide

22 Emmett St, Golden Square Vic 3555

Ph: (03) 5442 4806 Mob: 0411 352 036

Email: dkorchids@aanet.com.au

AOR 177 *Web: www.dkorchids.com.au*

RED DIAMOND design

ABN. 13 741 588 428

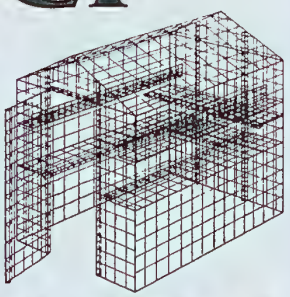
• Signs • Flyers • Advertisements
• Brochures • Catalogues • Magazines
• Business Stationery, etc.

p 0424 141 637

e rdd@netspace.net.au

Orchid Grower

Are your plants suffering from extreme weather conditions?



Shade Houses

by Peter's Glen

Will create the ultimate micro climate for your orchids
Specialising in Orchid Houses for over 25 years

Design Features • Kit form with written instructions and video can be shipped everywhere • Simplicity • Portability • Modular (can be lengthened to meet your needs) • No Maintenance • Strong • Economical

151 Railway Parade, Thorneside, Brisbane Qld 4158
Ph 07 3207 2793 Fax 07 3822 2307

New Zealand agents: Roger & Isabel Clotworthy, 223 Range Road, Papamoa, NZ
Ph (07) 575 0600 Fax (07) 575 0661 Mobile (025) 271 2777

AOR194

Dendrobium profusum

Dendrobium profusum

Dendrobium profusum Reichenbach *f.*, is one of the most delightfully coloured members of this section. The sepals and petals are cream to yellow, marked to varying degrees with pink to purple spots or blotches. This species is only known from the lowland forests of Luzon, where it grows in brightly lit positions.

Dendrobium profusum 'Purple Haze'

Cedarvale Orchids

Specialist breeders of Australian Native Orchid Species and Hybrids

2013 CATALOGUE NOW AVAILABLE

See Website for Listing / Or Send SAE

Visit us at upcoming shows (see website for venue details)

Ross & Rhonda Harvey

16 Heather-Anne Drive, DRAPER QLD 4520

Telephone: (07) 3289 1953

email: cedarvaleorchids@cedarvaleorchids.com

AOR 171 **website: www.cedarvaleorchids.com**

Dendrobium ravanii

Dendrobium ravanii
'Pink Back'

Dendrobium ravanii Cootes, was recently described in 2008, and is a beautiful addition to the Philippine orchid flora. Flowers are usually white in colour but pink forms have also been seen. The markings on the labellum, which are purplish, vary considerably in their intensity. The plants are only found in the mountains of northern Mindoro, in shaded locations, at elevations of 500-800 m. *D. ravanii* is probably the smallest growing member of the section, and plants a mere 10 cm long have flowered in our collection.

ORCHIDS NORTH
Gordonvale 20km South of Cairns
On The Bruce Highway

Vandas,
Dens,
Cats,
Phallies,
& more.

No Catalogue Available

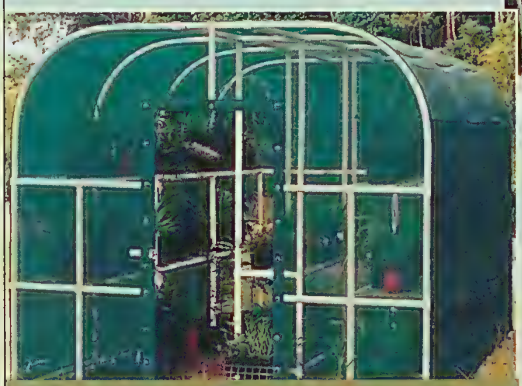
email:orchidsnth@bigpond.com
Phone (07) 4056 2357 Mob 0405 453 171

AOR 051

Dendrobium ravanii
(photo: Ravan Schneider)

THE PERFECT ORCHID HOUSE

Plant Stands Benches
Custom made



Perfect for your orchids

AUSSIE
SHADE &
HOT HOUSES

Manufacturers of quality shade & hot houses in varying sizes to suit your requirements. Our modular range offers built-in shelving, long life warranty and easy assembly. Perfect for improving flowering.

Contact your local agent
1300 881143
www.aussieshadehouses.com.au

AT LAST – NO ROT NO RUST NO MAINTENANCE

AOR 010

Campbell

ORCHID SPECIAL A&B FERTILISERS

Food for all Orchid Species Crystalline — fully water soluble — especially manufactured for better orchids. Rich in 8 essential mineral trace elements.

ORCHID SPECIAL A
(Yellow Compound) 11.13.16

Applied at initiation of flower spikes and continued through to the end of flowering. The high phosphorus and potassium and the low nitrogen content stimulates flowering and ensures a better bloom.

ORCHID SPECIAL B
(Blue Compound) 30.4.8

For established plants, applied at completion of flowering through to initiation of flower spikes. Young and developing orchids should be fed regularly the whole year. The high nitrogen stimulates plant growth and plant vigour. Packed in 500g and 3kg units. Periodic feeding 15g in 5 litres of water. Regular feeding 2g in 5 litres of water.

Campbell Orchid Special A&B Fertilisers "just for good orchids"

For the name of your local supplier contact:

NSW: Products of Excellence (02) 9417 0277, Beresford Park Nursery Supplies (02) 4966 5477, Frank Slattery Orchids (02) 9150 7985. **ACT:** C.I.C. Supplies (02) 6241 7477. **VIC:** Fertool Distributors (03) 9796 4433. **QLD:** Burnell Agencies (07) 3394 2211, J.C. & A.T. Searle (07) 5497 2022. **WA:** Nurserymens Supplies (08) 9353 2536. **SA:** Munns Lawn Co. P/L (08) 8277 8000. **NT:** Tropigro (08) 8984 3200.

A product of
COLIN CAMPBELL (CHEMICALS) PTY. LTD.
5 Blackfriar Place, Wetherill Park, NSW 2164
Telephone (02) 9725 2544 Fax: (02) 9604 7768
P.O. Box 6789, Wetherill Park, NSW 2164

AOR 037

Dendrobium serratilabium – typical form

Dendrobium serratilabium – pale form

Dendrobium serratilabium L.O. Williams, has a labellum with beautifully serrated edges, thus the specific epithet. The plant branches considerably, with new growths appearing from both the base of the plant and from along the pseudobulbs. Flower colour is variable, commonly cream with different degrees of red stripes on the segments, while others are orange-yellow and lack the red stripes. This is a fairly widespread species throughout the Philippines, preferring shady locations in mountain forests.

Dendrobium victoriae-reginae 'Gowan'

Dendrobium victoriae-reginae 'Powder Blue'

Dendrobium victoriae-reginae Loher, is probably the most well known and widely grown species from this section. The huge variation in the colour of the flowers is a joy to behold. The most popular and desirable forms are those where the flowers are of dark blue shades. As this species occurs in the high moist mountains (over 1300 m) of the Philippines, it can be successfully cultivated in a shade house in temperate zones, and can withstand winter minimum temperatures of 8°C. Plants are best kept in lightly shaded positions, with constant air movement, and should not be allowed to dry out.

Dendrobium victoriae-reginae

Dendrobium victoriae-reginae
(photo: John Varigos)

Dendrobium victoriae-reginae
– white form
(photo: Wally Suarez)

The last species described here, ***Dendrobium yeageri*** Ames & Quisumbing, is a medium-sized plant with pendulous pseudobulbs measuring up to 50 cm. The attractive flowers are coloured pale purple with darker stripes, while the tip of the labellum is white. This is another plant that tolerates cooler conditions, as it comes from the mountains of Luzon. It should be noted that *D. yeageri*, *D. ceraula* and *D. victoriae-reginae* are all closely related species and appear to have a common ancestor.

Culture:

A number of species in Section ***Calcarifera*** are plants of the tropical lowland rainforests and, as a rule, they require moderately bright, moist and humid conditions in cultivation, with warm to intermediate temperatures (minimum 16°C) throughout the year. For those species which come from high-altitude areas, such as ***Dendrobium victoriae-reginae***, cooler temperatures (range 25°C maximum, 10°C minimum) are desirable. In temperate climates, successful cultivation can be achieved in a glasshouse with appropriately controlled growing conditions. We grow plants in either pots or on mounts of tree fern fibre. For pots, a well-draining epiphyte medium should be used, consisting of pine bark mixed with pebbles or perlite. When plants are grown on mounts, sphagnum moss may be used to hold a little moisture around the roots. Bright filtered light is important, as is good air movement to reduce fungus-induced rot. Plants must not dry out, and it is recommended that they receive copious watering and regular applications of weak fertiliser solution during the growing period. In general, watering and fertilising should be eased during the cooler months.

Dendrobium yeageri

The plants described here are relatively easy to care for, and deserve to be more widely cultivated, although some species are uncommon and may not be easily available. Most have a pendulous growth habit, requiring only small or confined spaces, and well grown specimens will reward the proud owner with regular flushes of highly attractive flowers.

Acknowledgements:

Our sincere thanks to Ronny Boos, Derek Cabactulan, Ravan Schneider, Melanie Schori, Wally Suarez, David Titmuss and John Varigos for providing additional images to illustrate this article. All other images taken by the senior author, Jim Cootes.

References:

Comber J.B. 2001. ***Orchids of Sumatra***. Natural History Publications (Borneo), Sabah, Malaysia.

Cootes J. 2011. ***Philippine Native Orchid Species***. Katha Publishing, Philippines.

Wood H.P. 2006. ***The Dendrobiums***. A.R.G. Gantner Verlag, Ruggell/ Liechtenstein.

Jim Cootes

Email: jamescootes@optusnet.com.au

George Tiong

Email: gtiong1@hotmail.com

"Nicky's Slippers"

One of the world's leading Paph. breeders.

Exciting new Paphs. and Phrags. now available.

Contact us for a copy of our colour catalogue – send 3 x 60c stamps

NICKY ZURCHER

Box 326, Virginia, South Australia 5120

Phone/Fax (08) 8380 9360 Website www.nickysslippers.com.au

AOR 039

The Rock Lily Man

2013 Seedlings - All New - Now!

Your starting point for

Den. speciosum

Gerry Walsh: Grower & Breeder

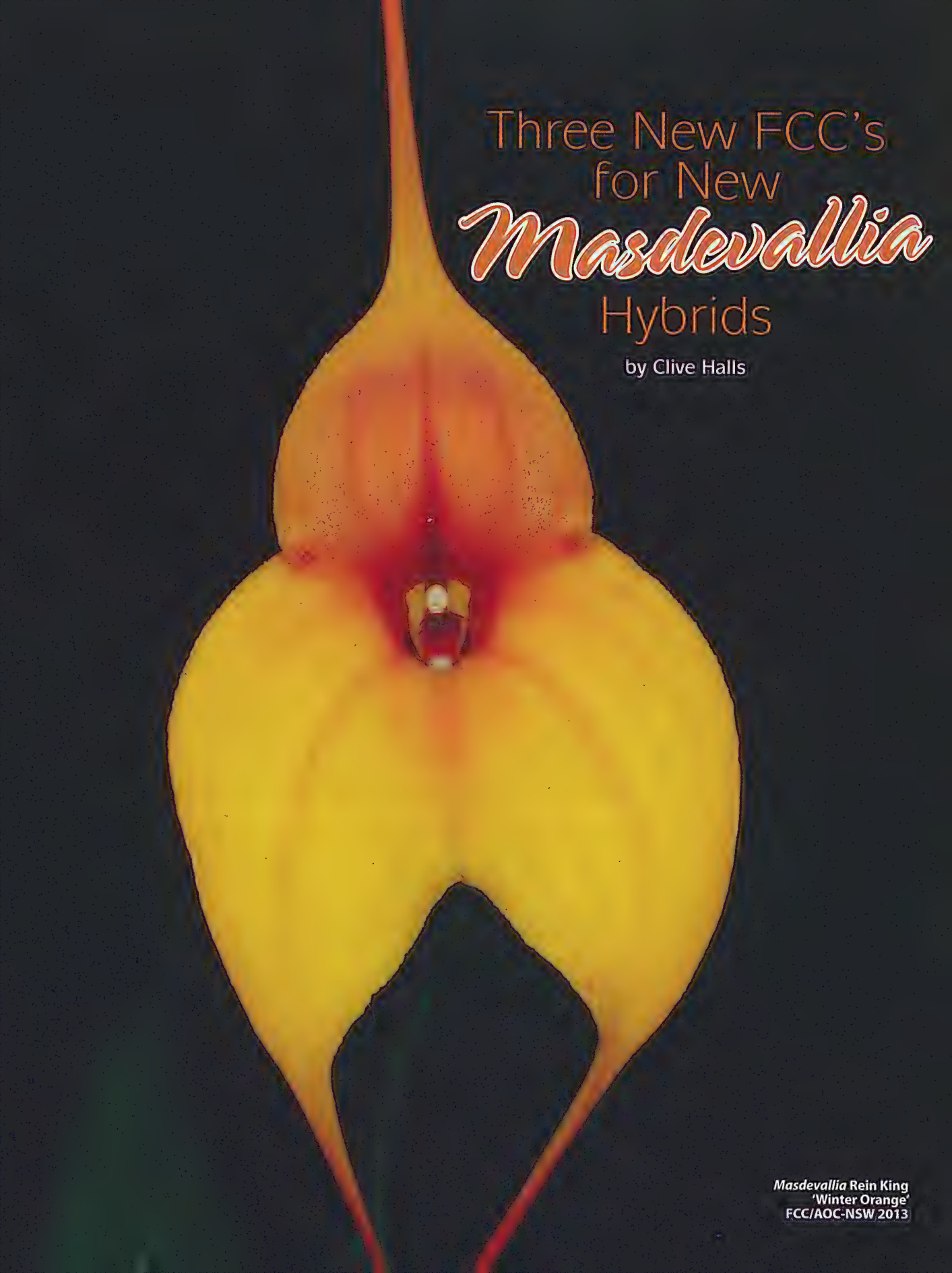
Seedlings, Divisions, Information

www.therocklilyman.com

0247 77 4456

Three New FCC's for New *Masdevallia* Hybrids

by Clive Halls



Masdevallia Rein King
'Winter Orange'
FCC/AOC-NSW 2013

At the recent 2013 St Ives Orchid Fair we were thrilled that five of our own *Masdevallia* hybrids were awarded. However to receive three FCC's (First Class Certificate) and two AM's (Award of Merit) at the same judging session is almost unheard of in Australia. We also benched what is arguably our finest red *Masdevallia* hybrid we have produced. What makes it even sweeter is that they are Australian-bred hybrids, and considered by many locally and abroad to be world class. Here are some notes on the three hybrids that were granted FCC's.

Clive Halls of Mt Beenak Orchids holding two of his treasured *Masdevallia* hybrids

Masdevallia Super Nova 'Beenak' FCC/AOC-NSW 2013

(Starfire '50' x Copperwing 'Sunburst')

The *Masdevallia* Starfire '50' came to me through Theo Schutz. He reckoned it to be one of the best large flowered Masdevallias he had seen. It was well before the Midas Touch grex came along and we hadn't seen such large flowers with the exception of *Masdevallia* Machu Picchu. For some reason it didn't hold pods so I neglected it for years until I made the cross with *Masdevallia* Copperwing in 2009. Not many seedlings were raised, less than twenty. So far we have flowered eight or nine, all are good, the awarded one so far the best.

An interesting point is that this line contains no *Masdevallia macrura*. The size attributable in the main to the parents of *Masdevallia* Dark Star (*cucullata* x *veitchiana*), the heavy substance directly from the *Masdevallia cucullata*, the lovely spots and fiery colour from *Masdevallia* Copperwing. Altogether a fortunate combination.

Masdevallia Rein Touch 'Beenak's Best' FCC/AOC-NSW 2013

(Rein Staal 'Tassie Giant' x Midas Touch 'Crown Vista')

Masdevallia Rein Staal was bred by the late Ray Thompson and the cultivar 'Tassie Giant' is the largest of this grex. A grower in Tasmania gave me the plant. The parents are *Masdevallia veitchiana* 'Prince de Galles' x *Masdevallia wurdackii*. Bright yellow with a red dorsal it's a distinctive but not a perfect flower. The *Masdevallia* Midas Touch 'Crown Vista' was bred by Peter Jackson and given to me by Preston Ling; so a lot of Tasmanian heritage in this cross.

The combination of these parents has matched up well, the Midas Touch correcting the faults in the Rein Staal while gaining some fiery intense colour. All of the grex have been large but this one really made me stand back. *Masdevallia* Rein Staal consistently produces interesting progeny and we have used it with success in a wide variety of crosses most notably through *Masdevallia* Rein Wine (Rein Staal x *cucullata*) to make Rein Sun. Interestingly the *Masdevallia cucullata* that popped up in Super Nova is here again. I think we will definitely bring these together if they are willing.

Masdevallia Rein King 'Winter Orange' FCC/AOC-NSW 2013

(Rein Staal 'Tassie Giant' x King of Kings 'Dane Hill')

Very similar to *Masdevallia* Rein Touch using the super *Masdevallia* King of Kings 'Dane Hill' instead of *Masdevallia* Midas Touch 'Crown Vista'. While not an FCC orchid like 'Crown Vista', 'Dane Hill' is magnificent and worthy of better than the AM it received. What I like about this cross is the intense and even colour. It's closer to yellow than orange with amazing substance and texture. It is one of those very hard to photograph colours, looking either too yellow or too orange. (I think this photo is pretty close!) Another strong point in these flowers is the lasting quality. Even when cut they last 3-4 weeks in water but on the plant 5 weeks plus.

Masdevallia Super Nova
'Beenak'
FCC/AOC-NSW 2013

Masdevallia Rein Touch
'Beenak's Best'
FCC/AOC-NSW 2013

Masdevallia Stripe King
'Beenak'
AM/AOC-NSW 2013

Masdevallia Stripe King
'Top Gun'
AM/AOC-NSW 2013

Masdevallia (Red Hot Chilli x John Tomaschke) 'Beenak'

Thoughts on Breeding Masdevallias

People often ask why I don't cross so and so *Masdevallia* with this and that awarded variety. Well we do use as many of the award and quality plants we flower, but as the crosses become more complex usually you get less and less viable seed. Even more disappointing many don't take at all or drop the pods after 4-5 weeks. Every year we make many dozens of crosses, sometimes successfully and sometimes not. Last season for instance was quite poor while the previous year was much better. It's a problem that can be solved by breeding back to the species such as *Masdevallia veitchiana* with quite good results but we would rather go forward with combinations of our new hybrids. With experience we recognise certain parents that are more fertile such as *Masdevallia* Copperwing and *Masdevallia* Sun Dancer and use them on those we are uncertain off, at least one half of the combination should work.

One thing is for sure there is plenty of scope in *Masdevallia* breeding. We are amazed every season at how many new shapes and colour combinations occur amongst the new seedlings. When we look at the way modern hybrid *Cymbidium* developed from a very small species pool, the *Masdevallia* genus with dozens (hundreds!) of species should have unlimited potential in shapes, sizes and colours.

Thank you to David Banks, who took the photographs accompanying this article.

Clive Halls,
Mt Beenak Orchids
27 Hacketts Creek Road, Three Bridges,
Vic 3797
www.mtbeenakorchids.com.au
Email: clivehalls@bigpond.com

Western Orchids/Laboratories
We offer a great range of **TISSUE CULTURE MEDIUM, HORMONE KEIKI PASTE, AGAR, FLASKS** – check our catalogues on the website
LABORATORY SERVICE for sowing & cloning
Watch eBay for our flasks each week.
Props: **Kevin & Helen Western**
P.O. Box 276
Blackwood SA 5051
ph/fx: **08 8270 4599**
email: **westernorchids@bigpond.com**
web: **www.westernorchids.com.au**
AOR 149

Queensland International Orchid Fair
QIOF
Friday, Saturday & Sunday
7th, 8th & 9th March 2014
Beenleigh Showground
James Street Beenleigh 4207
Open Friday & Saturday 8am-4pm
Open Sunday 8am-3pm
visit the website: www.orchidfair.com.au

Mt Beenak Orchids
No. 1 for Masdevallias
Check out our complete range of cool growing orchids on our website:
www.mtbeenakorchids.com.au
Cool growing orchids and Mail Order our speciality
27 Hacketts Creek Rd, Three Bridges, Vic. 3797
Ph/Fax (03) 5966 7253
Email: clivehalls@bigpond.com
AOR 124

Dendrobium adae – typical colour form from the Herberton Range (photo: Michael Harrison)

Unusual Colour Form of *Dendrobium adae*

Text and photos by David Banks

Dendrobium adae is an Australian indigenous species, endemic to north-eastern Queeensland. It is a member of the Section *Dendrocoryne*, and is closely related to *Dendrobium gracilicaule*, *Dendrobium fleckeri* and *Dendrobium finniganense*.

This species is restricted to the mountainous rainforests of Queensland's Wet Tropics; from the Paluma Range (north-west of Townsville) north to the Big Tableland (just south of Cooktown). It grows as an epiphyte on the main trunks and branches of various rainforest tree species, as well occasionally as a lithophyte. It is a montane species that often grows in quite shady situations, with an altitudinal range from 700 – 1600 metres in altitude. In fact, it has been found near the summits of Queensland's highest peaks, Mt. Bartle Frere (1622m) and Mt. Bellenden Ker (1593m). It generally grows in shaded aspects with very good air movement and high humidity. In some sites within these cloudforests, the plants can be exposed to bright light, with periods of direct sunlight. However, due the altitude, the plants never become hot, with moisture-laden mists frequently sweeping in to provide relief and refreshment for the orchids. Such conditions are not easy to replicate in cultivation.

We have been researching *Dendrobium adae*, *Dendrobium fleckeri* and *Dendrobium jonesii* throughout their distribution, in regards to flowering times, variation in colours, bloom size and number - in relation to their altitudinal range. We have made a number of trips to study these plants in the wild, and have learnt a lot during these sojourns. We have seen *Dendrobium adae* growing with *Dendrobium fleckeri*, in the same habitat and on the same trees. *Dendrobium fleckeri* is always found at the highest altitudes, yet due to their flowering periods being two months apart, these species never interbreed.

Above: Map of the Wet Tropics

The trained eye can differentiate between these species when not in bloom. The leaves on *adae* are generally longer (up to 4 leaves), glossier, with a slight twist, those in *fleckeri* (2, sometimes 3 leaves) are often shorter, darker but duller green, with prominent raised "ribbing" along the veins of the leaf, and are produced opposite each other. *Dendrobium adae* has a wider distribution and is far more common in the wild than *Dendrobium fleckeri*.

The typical colour form of *Dendrobium adae* is cream to light green sepals, with white petals and labellum. Generally three to five 25mm flowers are produced on short inflorescences. Robust clones may have up to eight blooms on the flowering stem. The flowers are highly fragrant through the warmth of the day, pleasantly reminiscent of hyacinths. *Dendrobium adae* has the best perfume of any Australian orchid in my opinion. In the wild, it blooms in August and September.

Historically, most texts have described the colour range of this species, but seldom has this been supported by photographic evidence. Some of these comments may have been from personal observation, whereas others have been repeated from earlier literature or hearsay.

Dockrill (1969) described the colour range in *Dendrobium adae* as "white, pale green or pale yellow". Bedford (1969) goes further to say "flowers are creamy white or pale yellow with or without reddish markings on the outside of the perianth, and with a few reddish markings at the base of the column and labellum". He also talks briefly about a plant with "pale-green flowers". Jones (1988) talks about flowers that "are white, greenish, pale yellow or apricot-coloured". He later states that "*Dendrobium adae* exhibits some variation in flower colour. A form with apricot-coloured flowers is distinctive". Jones (2006) expands on this (under the name of *Thelychiton adae*) stating that "plants from Mt. Windsor Tableland often have apricot-coloured flowers". There is a photograph (on page 403) of such a plant, with four flowers, showing obvious suffused markings on the back of the blooms. Also he states that "flowers usually white". Regarding these distinct apricot coloured forms, we have also seen these from the Mount Windsor Tableland, where they are common, growing with typical coloured forms, and the occasional one from the Paluma Range.

Lavarack & Gray (1992) talk of "fragrant cream to green flowers". Lavarack, Harris & Stocker (2000) expand on this with "the colour ranges from white to greenish, pale yellow and apricot".

In his updated revision Dockrill (1992) expands the colour range by stating that the flowers are "white, pale green or pale yellow, rarely pale pink". This grabbed my interest instantly. Was there indeed a "pink" *adae*, or was this another mirage like the so-called "pink" *Dendrobium speciosum*, *Dendrobium falcorostrum*, or "yellow" *Dendrobium kingianum*?

Upton (1989) was the most thorough in his colour description of *Dendrobium adae*. He stated that they "vary considerably in colour from white to creamy-white to greenish-white through pale green to pale yellow and almost apricot. Sometimes petals are white and sepals pale yellow to pale green, with some forms pinky-brown on the rear of the sepals. Flowers turn to apricot as they wither. Labellum white to green, with faint reddish markings". Of further interest was the black and white line drawing (on page 15) that Wal Upton completed in September 1967, showing flowers that clearly were suffused with colour on the back of the sepals. This was drawn from live material collected by Stephen Clemesha on Mount Lewis back in 1964.

So I wondered if such a "pinky" colour form of *Dendrobium adae* existed, as I had never seen such a plant or even a confirming photograph, or know anyone else that had seen one.

Above: ***Dendrobium adae*** – typical colour form *in situ* Herberton Range

Below: ***Dendrobium adae*** white-flowered form *in situ* Evelyn Tableland (LG)

Above: *Dendrobium adae* – apricot-coloured form from Mount Windsor Tableland *(photo: Michael Harrison)*

Below: *Dendrobium adae* – golden-coloured form *in situ* from Herberton Range

Above: *Dendrobium adae* – apricot-coloured form from Mount Windsor Tableland

Below: *Dendrobium adae* – golden-coloured form from Herberton Range

With this in mind, we organised at very short notice, a few days away to North Queensland in late August 2013, hoping to see large populations of *Dendrobium adae* in full bloom. We visited five sites, including Mount Lewis and higher parts of the Herberton Range and Evelyn Tableland, at altitudes of over 900 metres. We were in luck, as over an estimated 75% of adult plants were blooming. Some had already had their flowers chewed off, perhaps by possums? We examined hundreds of plants in bloom over five days.

We chanced upon a large colony near a rocky knoll on the Herberton Range at about 1100m and witnessed for ourselves the widest range of colours in this species we had ever seen. I was taking lots of photos of these plants *in situ*, before I literally stumbled upon a plant in full bloom heavily suffused with pinkish-brown on the back of the flowers. This was our "pink" *adae*! Apart from a gold-coloured flowering form growing on the very next tree, the rest of this vibrant population had flowers within the cream to pale green colour phase. We searched the vicinity for similar coloured flowers, but to no avail. Two days later, at a location less than 20km away, we did locate two individual plants that had the same colouration as our "pinky" one, but not as intense in colour. You will note from the photos that this main plant had pigment covering not only the back of the sepals, but also over half of the petals. From our observations, we would estimate that over 90% of wild populations consist of flower colours in the cream to light green phase.

Thank you to Mike Harrison, John Roberts and James Walker for discussion and firsthand accounts of this and related species.

References:

- Bedford, R (1969). *A Guide to Native Australian Orchids*, Angus & Robertson Ltd, Sydney.
- Dockrill, A.W. (1969). *Australian Indigenous Orchids*, Vol. 1, The Epiphytes: The Tropical Terrestrial Species, SGAP, Sydney.
- Dockrill, A.W. (1992). *Australian Indigenous Orchids*, (2 volumes, revised edition), Surrey Beatty & Sons, Sydney.
- Jones, D.L. (1988) *Native Orchids of Australia*, Reed Books, Frenchs Forest, NSW.
- Jones, D.L. (2006) *A Complete Guide to Native Orchids of Australia including the Island Territories*, Reed New Holland, NSW.
- Lavarack, P.S. & B. Gray (1992) *Australian Tropical Orchids*, Frith & Frith Books, Malanda, Qld.
- Lavarack, P.S., W.F. Harris & G. Stocker (2000) *Dendrobium and its Relatives*, Kangaroo Press, East Roseville, NSW.
- Upton, W.T. (1989) *Dendrobium Orchids of Australia*, Houghton Mifflin, Melbourne.

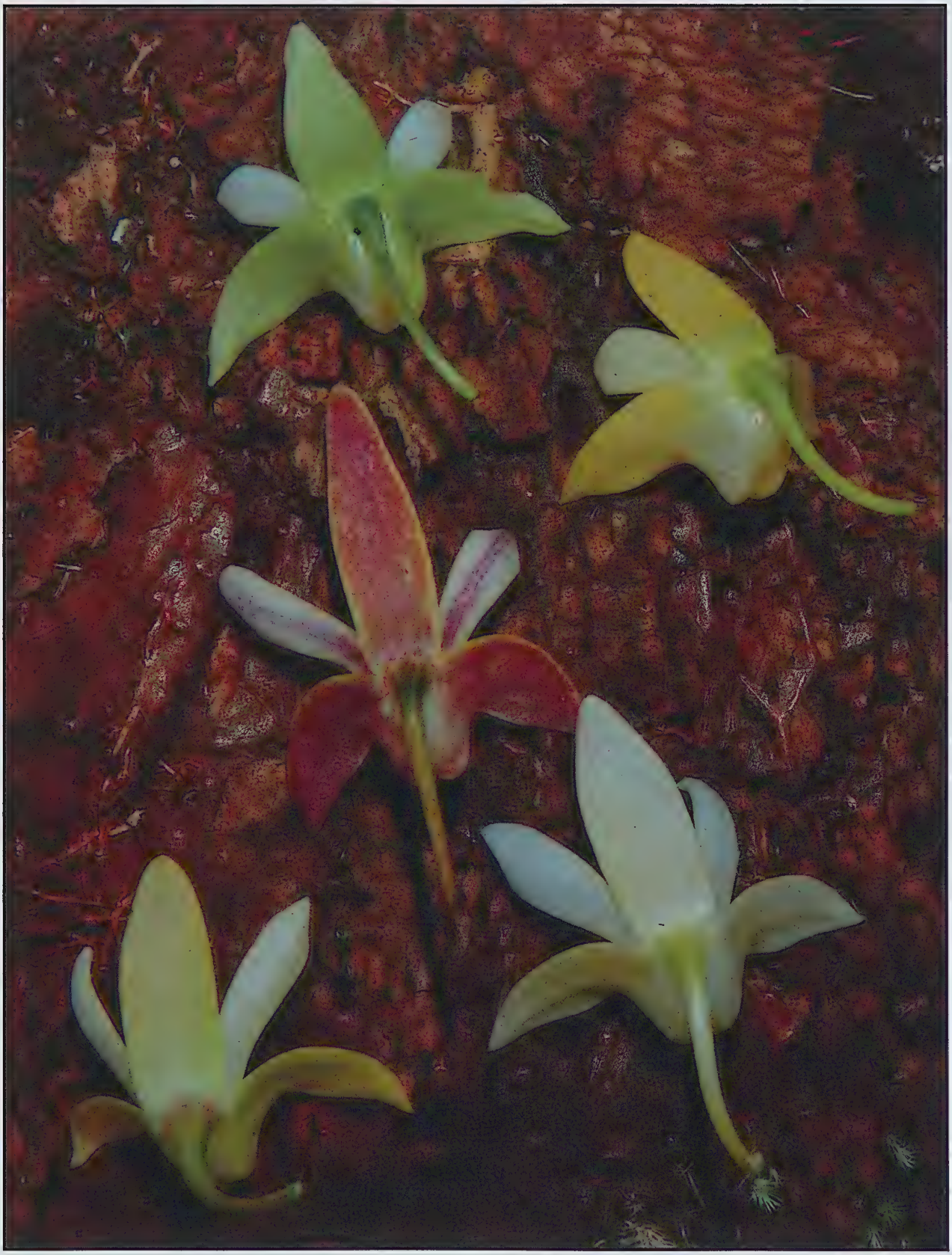
David Banks
Seven Hills, NSW
Email: david@hillsdistrictorchids.com

Left:
Dendrobium adae
– pinkish-brown coloured form from Herberton Range

Above: ***Dendrobium adae*** – five different colour morphs from the same population on the Herberton Range

Below left: ***Dendrobium adae*** – pinkish-brown coloured form, front view

Below right: ***Dendrobium adae*** – pinkish-brown coloured form, rear view



Above: ***Dendrobium adae*** – back view of five different colour morphs from the same population on the Herberton Range

My Orchid Trek in Laos

by Peter Meyer

In November 2012 a really good German friend of mine, told me that he was going to Laos and Cambodia in January 2013. I decided to tag along. He's a great friend and I hadn't seen him for almost two years and I hadn't been to either of those countries. And of course, any new country usually has orchids and that piques my interest.

We decided to start in Vientiane, fly to Luang Prabang (these were both in Laos), then to Siem Riep and the fabulous Angkor Wat and finally Phnom Phen. These last two are in Cambodia

As soon as I decided to join Harald on this trip, I started to research Orchid in these areas. To my great disappointment, the internet which is where I do most of my research was very lean on information on Orchids in Laos or Cambodia.

Angkor Wat

Angkor Wat

I found a couple of Orchid based tours. One to a commercial Orchid farm and a couple of tour companies but everything was sold out until the end of February. The only available "tour" that I found was an Echo trek to Phou Khao Khouay National Park to in search of "Native wild orchids" or to quote "Accompanied by local guides in this full day trek, ample wildlife-spotting opportunities await during your walk through Phou Khao Kway National Park, a varied landscape filled with lush forests, cascading waterfalls and gorgeous cliffs". Not sure why Khouay is spelt two ways.

This was via Buffalo Tours and while it cost $300 for the day, it sounded interesting and it was the first day of our holiday and as I was getting a bit desperate I booked it. I could find anything else in the other three cities we were to visit.

So I arrived in Vientiane and found Harald in the hotel he had booked. Accommodation was at a premium in January and as Harald had been before, I trusted his judgement which is usually impeccable. Well I will say that you don't get much for $30 per night, but it was cheap!

So the next morning we were collected by the English speaking guide from Buffalo Tours and set off for the "Village" to meet the local guide who would accompany us. We walked about 500 metres through the village to the river bank and down to the canoes that would take us about an hour down river to the drop off spot for access to the National Park. Access to the canoe and the canoe itself were maybe not what I would have expected.

Angkor Wat

Anyway we set off down river, cross legged and not too comfortable. The seats in the canoe were not very big. The river was very shallow and after travelling about 10 minutes, the canoe hit bottom, violently lurched left and right and half filled with water. Our guides used a pair of thongs that belonged to the boat driver to bail out the water and we carried on. We grounded a few more times but not as badly and after about 50 minutes we reached the spot to start our "50 minute" trek.

We walked up the riverbank which was rather steep but I didn't think too much of it and set off into the "park". Well we walked, climbed, clambered and continued on. Our English speaking guide pointed out various plants that had medicinal uses and I kept looking for Orchids.....when I could look up. Most of the time I was looking at where my feet were going! The walk was generally quite difficult, not a stroll through the park. We walked through creek beds and washouts, up and down rock faces, across and up rivers and through areas over trees and through bamboo.

After about an hour or so I had to ask. (I'd resisted up to then.) "How much further?"

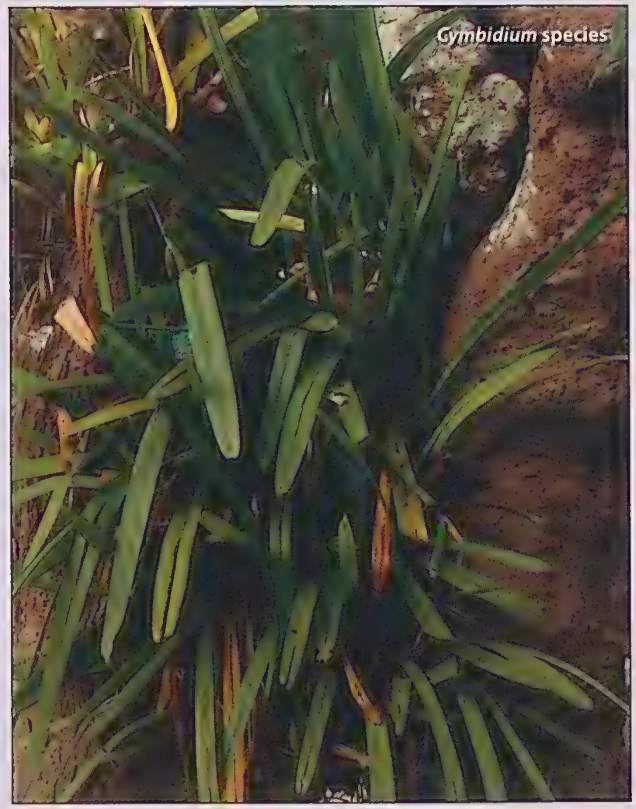
Half way was the answer and I can't remember what I thought but the 50 minute trek was turning into an epic journey and we were getting hot.

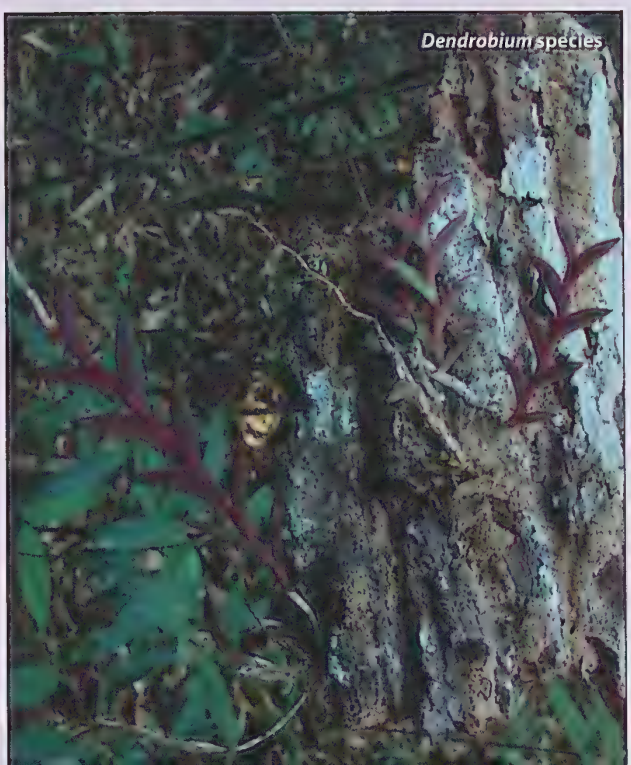
My guide assured me that the first half was the more difficult. In hindsight that wasn't really the case. I guess I'm not built for climbing up and down rocks and trees anymore. It actually took us two and a quarter hours and I'm not sure how far it was but I'm guessing 4-6 kilometres.

Nevertheless after about another 45 minutes we saw our first Orchid. Mainly Dendrobiums, Agrostophyllums, Cymbidiums, Bulbophyllums and Erias and they were native and they were in the wild and I did spot them. So I was happy!

Canoe as transport

Agrostophyllum species


Cymbidium species


Dendrobium species

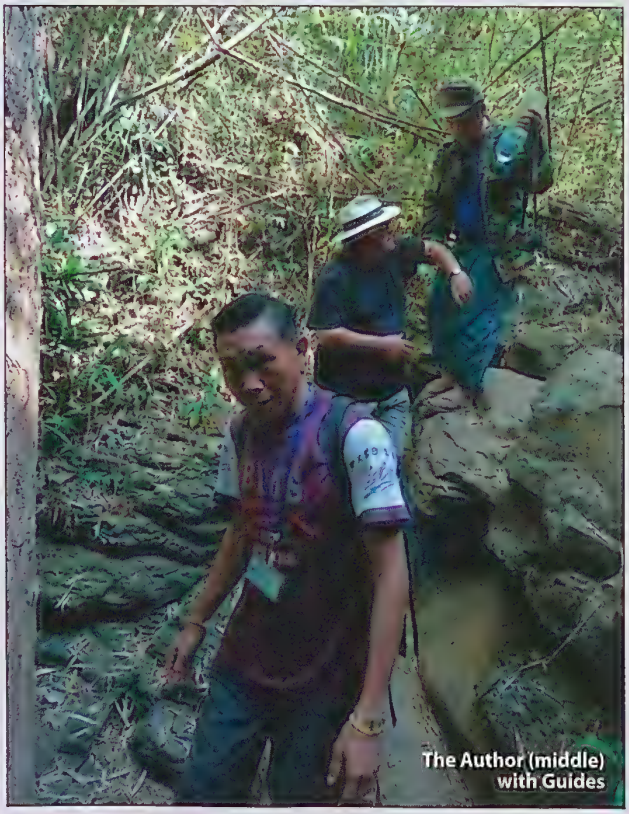
Dendrobium moschatum

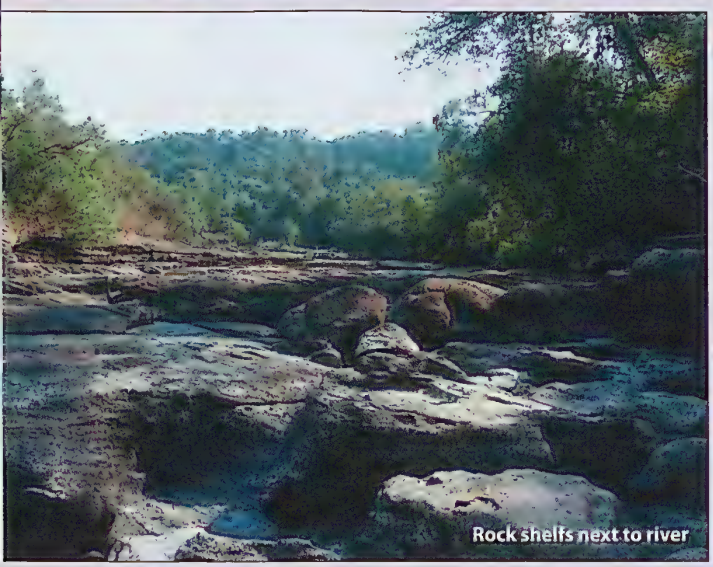
Eria species

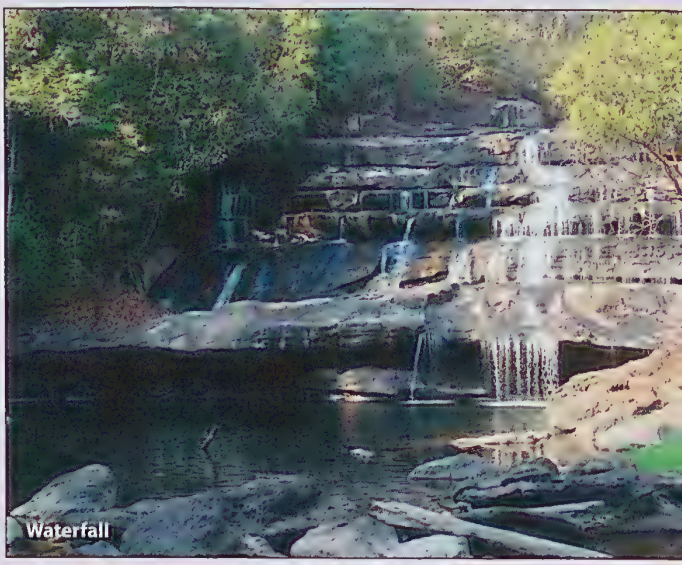
Unfortunately there were no flowers but the plants are quite spectacular and it was nice to see them and it was an adventure. We got to the waterfall. We had a very local lunch of fish and sticky rice and we did see a lot of the countryside.

We also saw quite a few orchids in other situations. I would have to say that the highlight of my trip was my visit to Angkor Wat. I've seen lots of ruins and churches, temples and palaces but nothing holds a candle to Angkor Wat. I would recommend it to anyone who likes travelling.

Peter Meyer
Email: petermeyerblind@ozemail.com.au


The Author (middle) with Guides


Rock shelfs next to river


Waterfall

The sister-trio from Mexico; *Acineta barkeri*, *Acineta hagsateri* and *Acineta salazari*

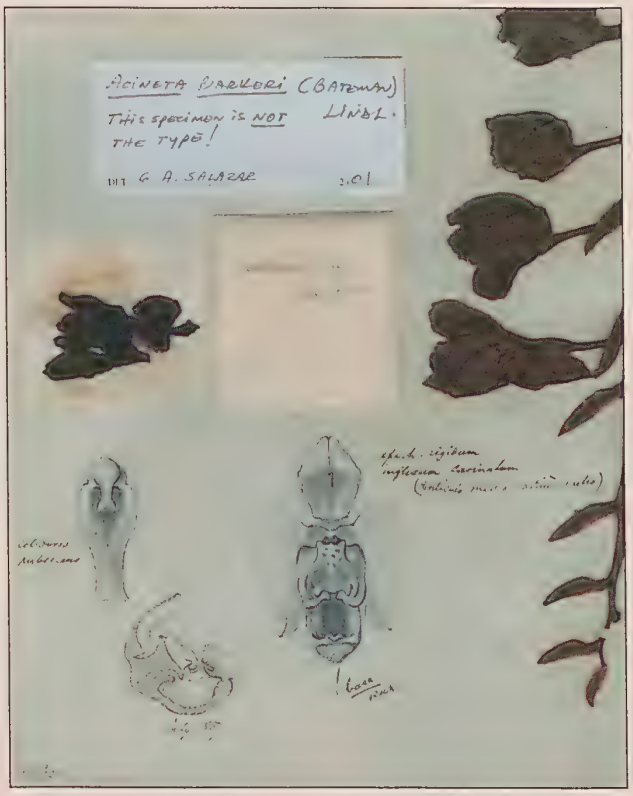
by Rudolf Jenny

Acineta is a rather difficult genus to study because its species are seldom seen in cultivation and in most cases there is no information about the origin of the plants available. Beside this quite a few of the species look - beside the colour - very much alike for the first view and preserved material is rare. There are only three published and more or less comprehensive treatments of the genus available, the first in 1917 in *Orchis* by Rudolf Schlechter, the second by Günter Gerlach in the 3rd edition of Schlechter's *Die Orchideen* of 1999 and the third by the late Eric A. Christenson in 2006 in the *Orchid Digest*. Most of the *Acineta* species are distributed in northern South America, a few in Central America and until 2002 only one species from Mexico, *Acineta barkeri*.

Above: *Acineta barkeri* as *Peristeria barkeri* from Bateman, *The Orchidaceae of Mexico and Guatemala*, 1838

Acineta barkeri was described and beautifully illustrated as *Peristeria barkeri* by James Bateman in 1838 in his monumental book *The Orchidaceae of Mexico and Guatemala*. The plant was collected by John Ross in Xalapa, Mexico, the type is in Kew. Ross was collector for George Barker of Springfield near Birmingham, England, Barker received the plant in 1837. The beautiful drawing of Barker's flowering plant was made by Mrs.Withers and Bateman dedicated the new species to its owner. John Lindley described the new genus *Acineta* based on *Acineta humboldtii* in 1843 in *Edwards's Botanical Register* and recombined Bateman's *Peristeria barkeri* to *Acineta barkeri*. The Greek word *acinetos* means immovable, Lindley referred with this to the immovable lip in *Acineta* species, where in the "true" *Peristerias* the lip is moveable. There is a specimen with a very detailed drawing of the lip of *Acineta barkeri* in the herbarium of Kew, of unknown origin, dated with July 1857, and with the remark from Gerardo Salazar from 2001: "This specimen is not the Type !".

Below: Flower dissection on a specimen of *Acineta barkeri* in the Kew herbarium



A second illustration of the species – still as *Peristeria barkeri* - was published together with a description by William Jackson Hooker in *Curtis's Botanical Magazine* in 1846, the drawing was made by Fitch after a plant from the Kew collection, in flower in 1843. Obviously Hooker was not aware of Lindley's genus *Acineta* and his recombination of *Peristeria barkeri* to *Acineta barkeri* in 1843. The very same illustration was published by Hooker in 1851 *A Century of Orchidaceous Plants selected from Curtis's Botanical Magazine*. In 1848 Joseph Paxton published in his *Paxton's Magazine of Botany* another drawing of *Acineta barkeri*, the plant S. Holden used for his drawing was from the collection of R.G. Lorraine in Carsbalton, England. In 1855 Charles Lemaire followed with the description and illustration of *Acineta barkeri* var. *aurantiaca* in *L'Illustration Horticole*, the drawing from L. Stroobant was made after a plant in the collection of the nursery of Ambroise Verschaffelt in Belgium. The plant was – following Lemaire – collected by the brothers Tonel in Mexico. Christenson declared *Acineta barkeri* var. *aurantiaca* as a synonym of *Acineta barkeri*, Lemaire himself wrote: "*Acineta barkeri* var. *aurantiaca* Nob.sub praes.tab.sed species forsam distincta? (A.squamulifera !)". This means: "*Acineta barkeri* var. *aurantiaca* described below by us (Nob.), is probably a distinct species?", if the plant would turn out to represent an own species, Lemaire proposed the epithet *squamulifera* (scaly).

Also John Day had *Acineta barkeri* in his collection, on 16th of August 1870 he made a drawing of two flowers and a flower dissection for his "Scrap Books", he had purchased the plant with Stevens, but without any information about its origin.

Above: *Acineta barkeri* from *Paxton's Magazine of Botany*, 1848

Acineta salazarii, named after the Mexican botanist and orchidologist Gerardo Adolfo Salazar Chavez, was described and illustrated by the late Miguel Angel Soto Arenas in *Icones Orchidacearum* in 2002. The plant was collected by Gerardo Salazar in Oaxaca, the holotype is in Mexico (AMO), and an isotype is in Kew (K). Following Soto the records of *Acineta chrysantha* in El Salvador and Mexico are wrong, those plants are representing *Acineta salazarii*, this species is distributed in southern Mexico, El Salvador and Guatemala. Eric Christenson wrote in his treatment of the genus in the *Orchid Digest* in 2006 that *Acineta gymnostele*, described and illustrated by Rudolf Schlechter without information about its origin in *Orchis* in 1917 could be an earlier name for *Acineta salazarii*. Schlechter's drawing and description is all we have of the species, the type was lost during the fire in the Berlin herbarium in 1943.

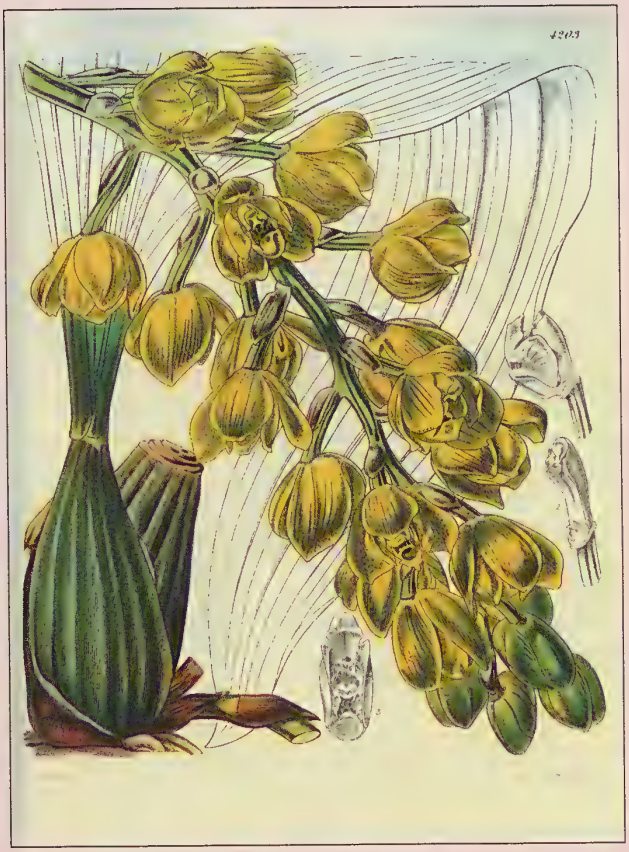
Acineta hagsateri, named after Eric Hagsater engineer and orchidist from Mexico, was described by Gerardo Salazar and Miguel Soto in 2002 in *Icones Orchidacearum*. The plant was collected by Soto in Guerrero, Mexico, the holotype is in Mexico (AMO). The species seems to be endemic to the western Mexico state Guerrero. Only a few plants are known.

Determination of *Acineta* species without preserved flowers or detailed photos of the interior of the flower is extremely difficult. Additionally preserved material of *Acineta* with clear information about its origin is – as explained above – quite rare. So it is extremely difficult to estimate the degree of variability in morphology within a particular species. Whether colour is a criterion for species delimitation or not is another question. In general the bees pollinating *Acineta* are attracted by the fragrance, so probably colour is of minor importance and has no impact to the probability of successful pollination. Again, we simply do not have enough useable material of species of this genus and at the end we might have to come back to the decision to separate the plants from Mexico in three different species.

It is well worth to give one particular illustration of *Acineta barkeri* a bit more attention, it is the one in *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève* from 1847. Alphonse Louis Pierre Pyramus de Candolle was born on 27th of October 1806 in Paris as son of the famous Augustin Pyramus de Candolle. His father in 1814 was the chair of botany at the University of Geneva, Switzerland. In 1822 his son started to study at the same university, philosophy, natural science and physics and got in 1825 his bachelor in science. Following the wish of his father, Alphonse continued with the study of law. In 1827 he became Honorary Professor and worked under his father in the direction of the botanical garden in Geneva. In 1835 he became full professor and followed his father in his position as director of the botanical garden. Augustin Pyramus de Candolle died in 1841 and Alphonse took over all his collections, the large library and all his notes and manuscripts. For political reasons Alphonse was urged in 1850 to give up his position at the University of Geneva and also as director of the garden. Fortunately his financial situation was solid enough to allow him to continue his studies on a private basis and without his previous obligations as professor and director of the garden, he employed a curator for his collections and continued with his projects. In 1855 his most important work was published, the *Géographie botanique raisonnée ou exposition des faits principaux et des lois concernant la distribution géographique des plantes de l'epoque actuelle*. Beside this Alphonse was after Volume 8,

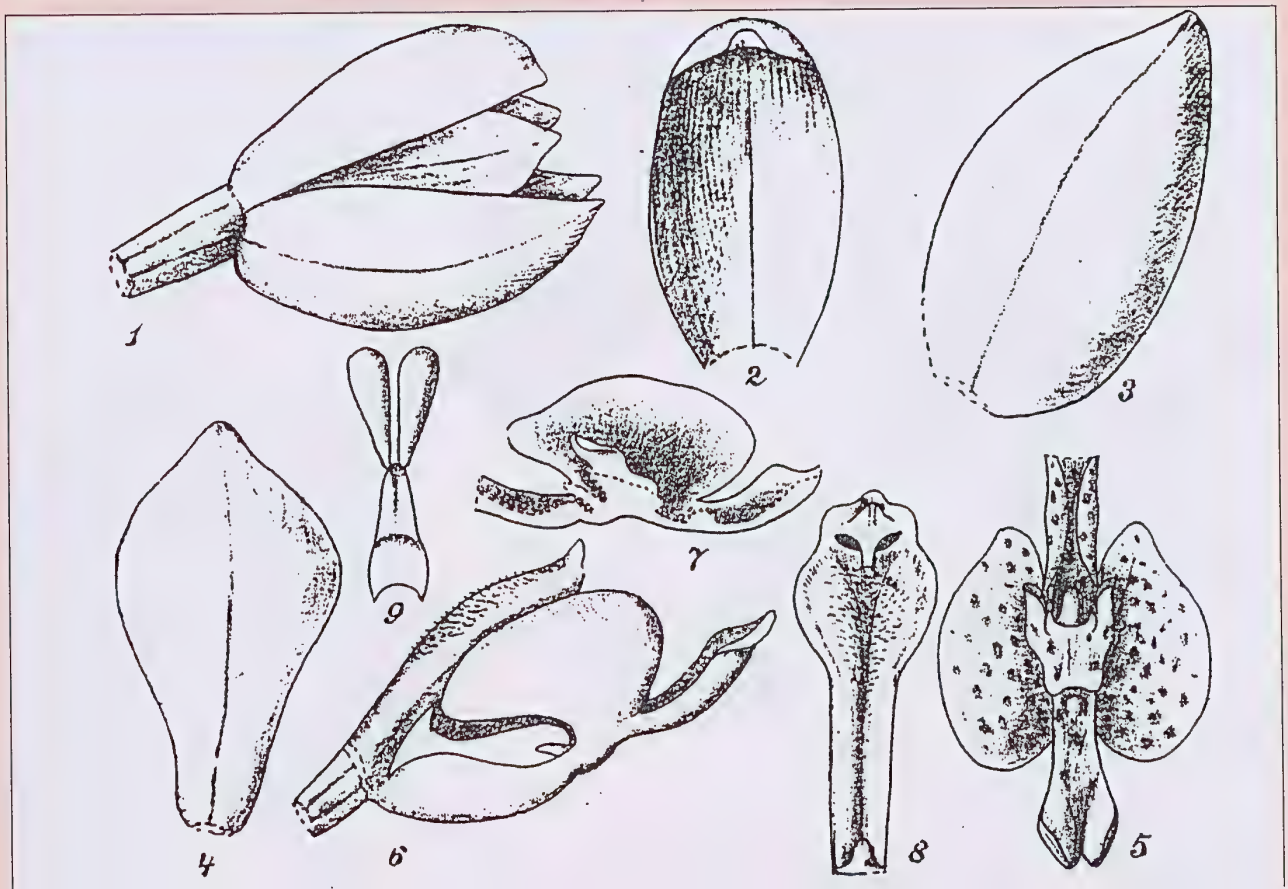
Editor of the *Prodromus systematis naturalis regni vegetabilis*, a work started in 1824 by his father, Alphonse added parts treating not less than 40 plant families. Alphonse Louis Pierre Pyramus de Candolle died on 14th of April 1893 in Geneva.

In 1847 Alphonse De Candolle, at this time director of the botanical garden in Geneva, Switzerland, published in *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève* a drawing and flower dissection of *Peristeria barkeri* from a plant of the collection of the garden. Candolle wrote that he assumed to have a new species in his hands and already prepared its formal description, but after comparison with the plate from *Curtis's Botanical Magazine* he realised that it was *Peristeria barkeri*. He was not certain about the origin of the plant, he wrote that "..que peut-êthre elle es originaire de Bahia." (probably coming from Bahia), this is certainly wrong, so far no Acinetas are known from Brazil. Within the *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève* 10 parts of *Notices sur les Plantes rares cultivées dans le jardin botanique de Génève* were published between 1823 and 1847, 4 parts between 1823 and 1831 by Augustin Pyramus de Candolle, 4 parts between 1840 by Augustin Pyramus de Candolle together with his son Alphonse Louis Pierre Pyramus de Candolle, and 2 parts in 1846 and 1847 by Alphonse Louis Pierre Pyramus de Candolle alone. The articles were about extraordinary plants cultivated in the botanical garden in Geneva, Switzerland. Only a few orchids where treated and illustrated, in no.8 of 1840 *Maxillaria deppei* (today *Lycaste deppei*), *Epidendrum candollei*, *Bletia purpurea* and as new species described by Alphonse *Epidendrum obtusum*. In no.9 from 1846 we find *Acropera loddigesii* and *Cattleya forbesii* and in no.10 from 1847 we find *Peristeria barkeri* (today *Acineta barkeri*) and the new description of *Brassia longiloba*.



Above: *Acineta barkeri* as *Peristeria barkeri* from *Curtis's Botanical Magazine*, t.4203, 1846

Below: Line-drawing of *Acineta barkeri* by Rudolf Schlechter from *Orchis*, 1917

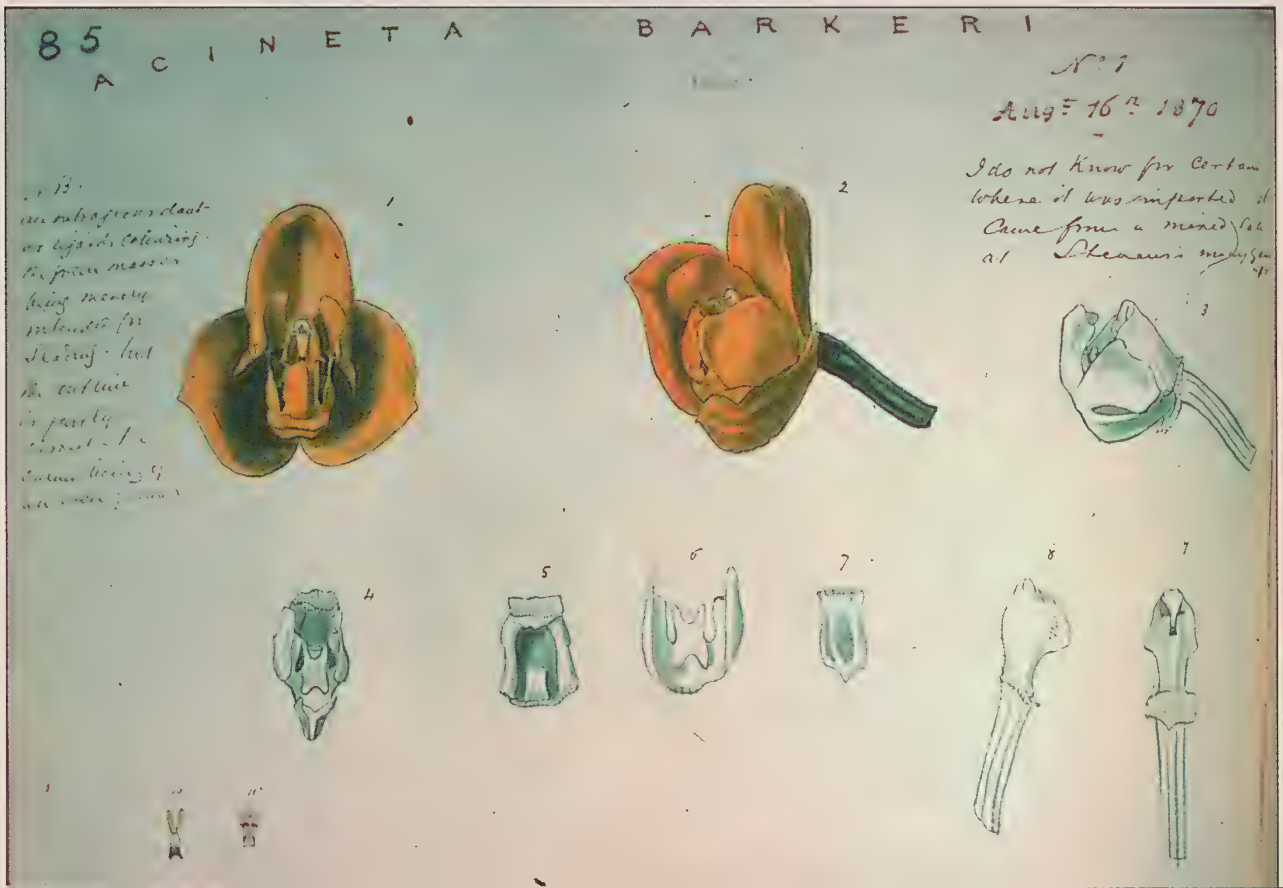


References/Literature:

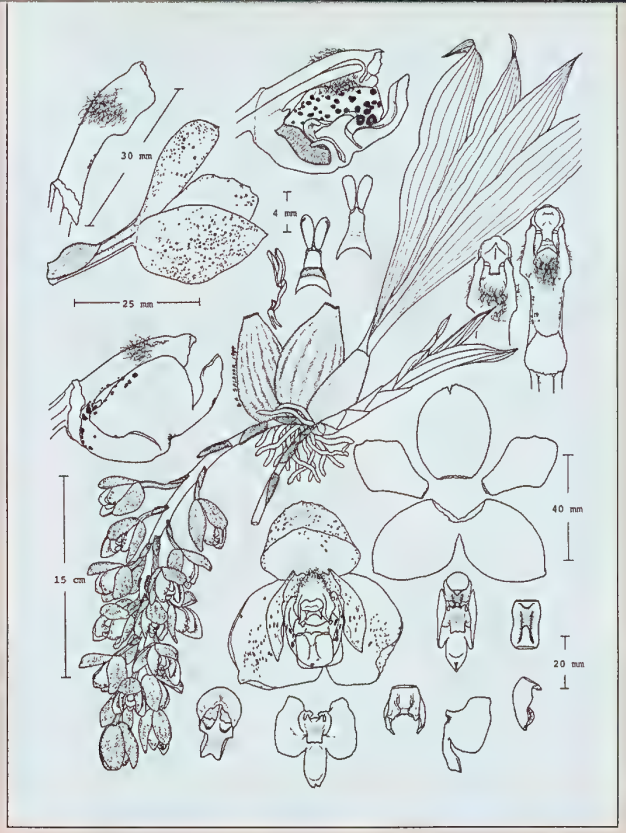
Anonymous (1851)	*Gardeners' Chronicle* :645
Anonymous (1887)	*Gardeners' Chronicle* ser.3,2:334
Anonymous (1898)	*The Garden* 54:332
Anonymous (1925)	*Orchid Review* 33:308 – 309
Bateman, J. (1838)	*The Orchidaceae of Mexico and Guatemala* :t.8
Candolle, A.de (1847)	*Mémoires de la Société de Physique et d'Histoire Naturelle de Genève* 11(2):13 – 18 & t.1
Christenson, E.A. (2006)	*Orchid Digest* 70(4):232-251
Gerlach, G. (1999)	in R.Schlechter, *Die Orchideen* ed.3,1(37-38):2421 – 2427
Hagsater, E. & G.A.Salzar (1990)	*Icones Orchidacearum* 1:t.001
Hagsater, E. & M.Soto (2002)	*Icones Orchidacearum* 5-6:t.514
Hagsater, E. & M.Soto (2002)	*Icones Orchidacearum* 5-6:t.515
Hagsater, E. & al. (2005)	*Orchids of Mexico*
Hooker, W.J. (1846a)	*Curtis's Botanical Magazine* 72:t.4203
Hooker, W.J. (1846b)	*A Century of Orchidaceous Plants* :52 - 53
Lemaire, C. (1855)	*L'Illustration Horticole* 2:t.44
Lindley, J. (1843)	*Edwards's Botanical Register* 29:misc.100
Paxton, J. (1848)	*Paxton's Magazine of Botany* 14:145 – 146 & t.
Reichenbach, H.G.fi. (1852)	*Walpers Annales Botanices Systematicae* 1:784
Reichenbach, H.G.fil.(1849)	*Walpers Annales Botanices Systematicae* 3:546 – 547
Reichenbach, H.G.fil.(1863)	*Walpers Annales Botanices Systematicae* 6:608 - 611
Schlechter, R. (1917)	*Orchis* 11:37 – 40
Suarez, O.G.(2012)	*Algunas Orquideas de Mexico* :5
Veitch, H.J. (1893)	*A Manual of Orchidaceous Plants* 2(9):130

Rudolf Jenny
Moosweg 9
3112 Allmendingen
Switzerland
Email: rjorchid@gmx.ch

Below: *Acineta barkeri*, drawing by John Day in his Scrap-books, 16.8.1870

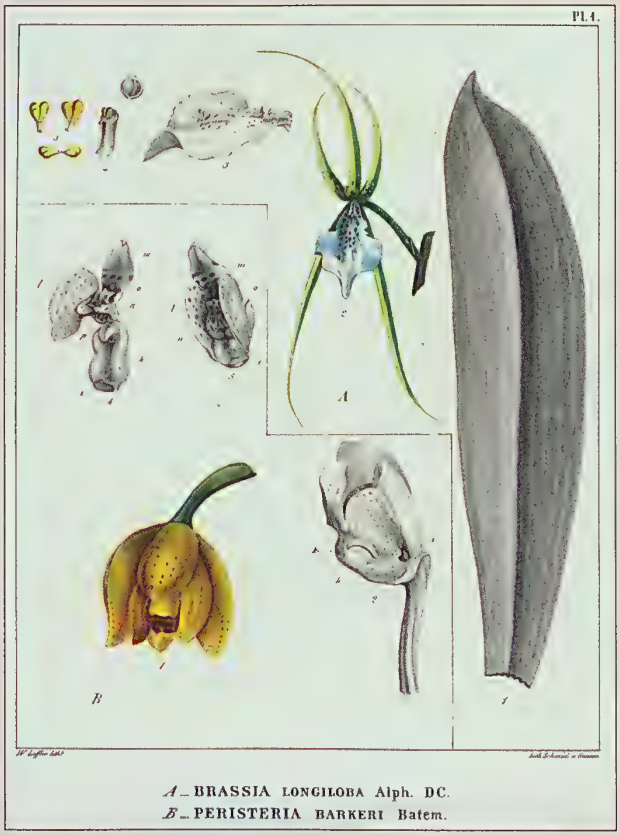


Above: *Acineta barkeri* var. *aurantiaca* C.Lemaire from *L'Illustration Horticole*, 1855



Above: Drawing of *Acineta barkeri* by Gerardo Salazar from *Icones Orchidacearum*, 1990 (with permission by Gerardo Salazar)

Below: Drawing of *Acineta barkeri* from *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, 1847

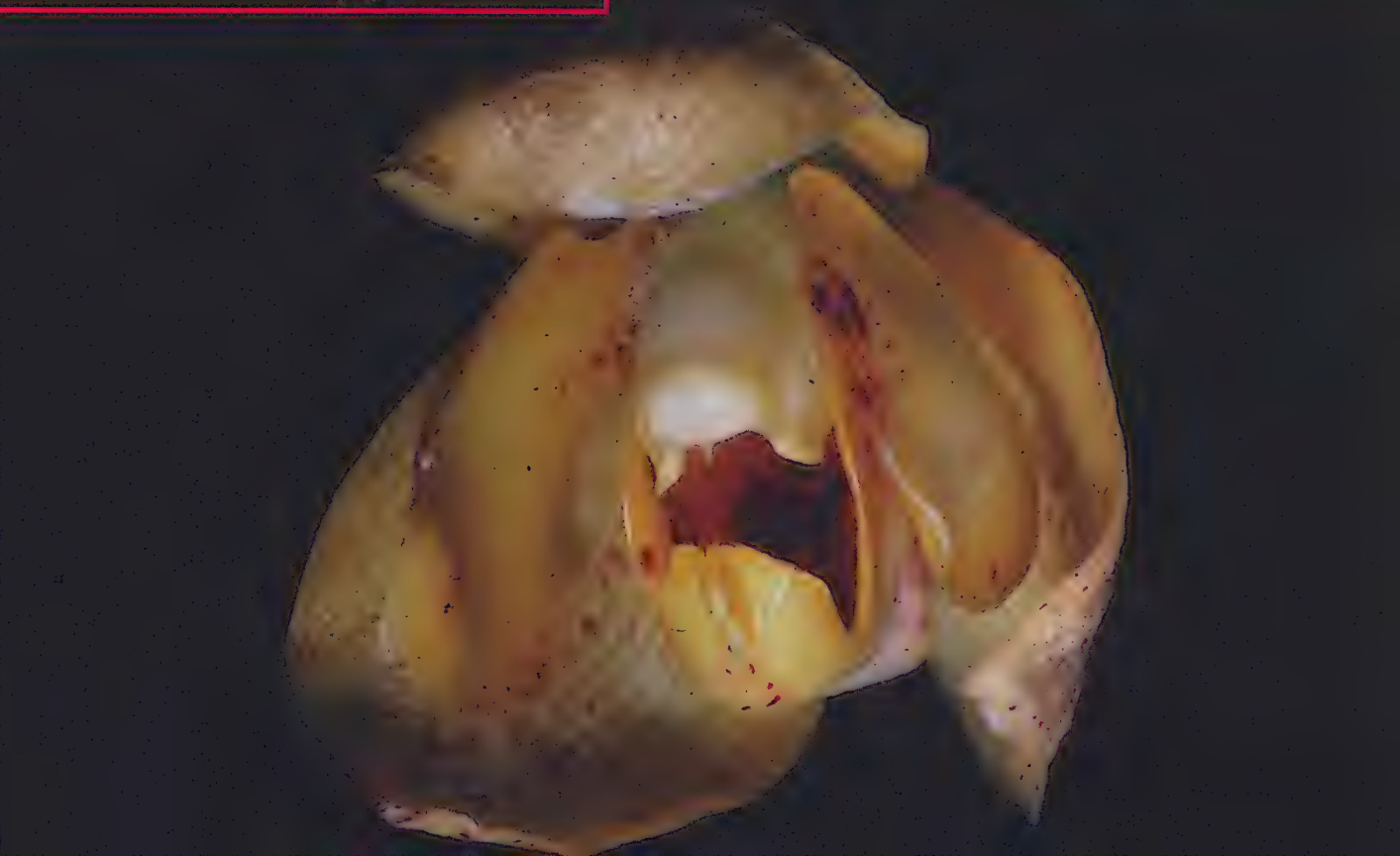


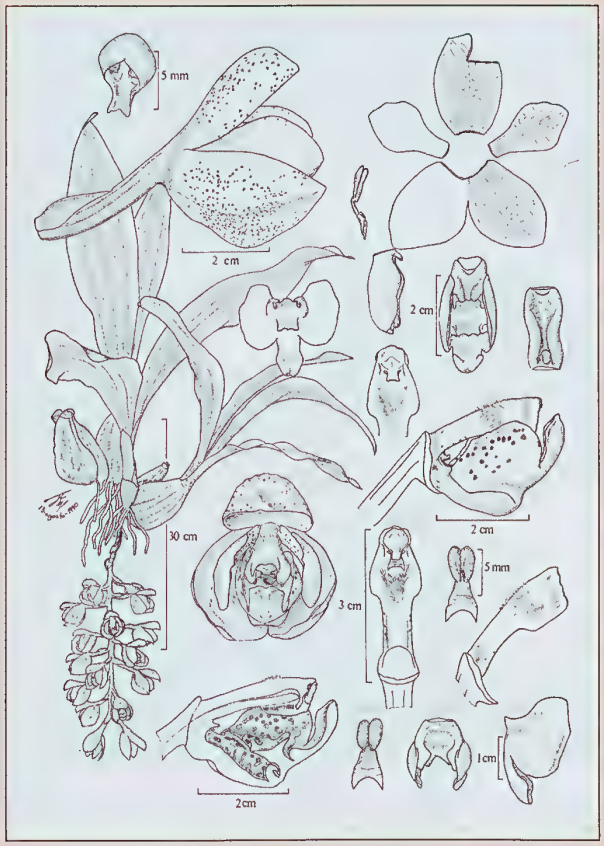
TINONEE ORCHIDS
FREE CATALOGUE
includes most genera
NURSERY OPEN
Mon - Fri 9am-4pm
TINONEE ORCHID NURSERY
768 Tinonee Road, Tinonee, 2430
Phone/Fax: (02) 6553 1012
orchids@tinoneeorchids.com
www.tinoneeorchids.com

Left:
Inflorescence of *Acineta barkeri*, plant collected near Las Margaritas, Mexico,1720 m (with permission from Herwig Herzum, Neunkirchen, Germany)

Right:
Lip of *Acineta barkeri* (with permission by Eric Hagsater, AMO)

Below:
Single flower of *Acineta barkeri* (with permission by Eric Hagsater, AMO)





Above:
Drawing of
Acineta hagsateri
by R. Jimenez from
Icones Orchidacearum, 2002
(with permission
by Eric Hagsater,
AMO)

Upper Right:
Single flower of
Acineta hagsateri, 1997
(Type-specimen no.4396)
(with permission
by Eric Hagsater,
AMO)

Right:
Type of
Acineta hagsateri
(no.4396) from the
herbarium AMO
(with permission
by Eric Hagsater,
AMO)

ORCHIDACEOUS SUPPLIES

Suppliers of a wide range of Orchid Accessories

Whether you are a hobbyist or a professional orchid grower – we can supply your needs.

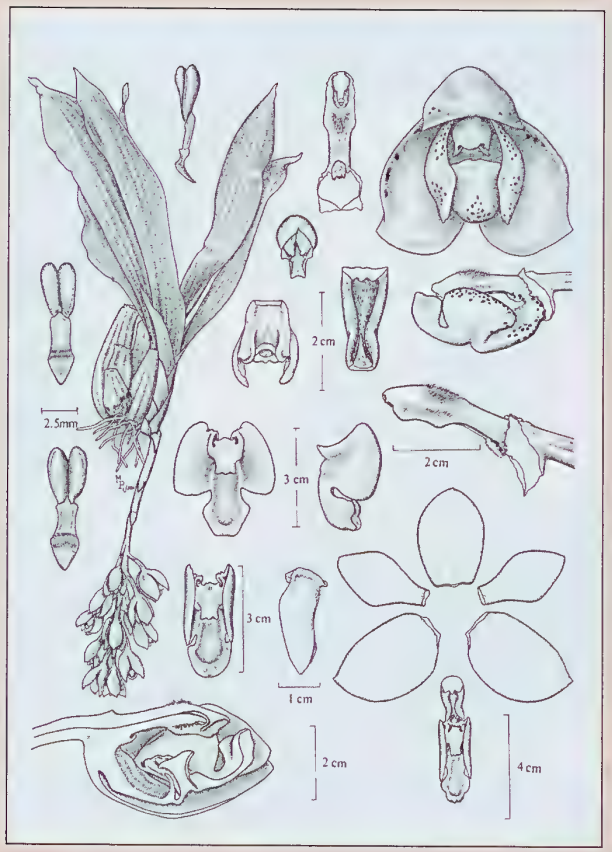
Pots **– dome pots – Port Pots – trays – stakes – plant clips – Pot Clips –**
Labels **– pens – fertilisers – hangers – wide range of wire products.**

Growing medias **– bark, coconut husk, treefern, perlite, peat, charcoal, sphagnum moss and more.**

Agent for *Eco Products*
Catalogue available on request

Grahame & Margaret Muller
P.O. Box 4192, Tinana, Qld. 4650
Ph: 07 4122 1251 Fax: 07 4122 4539
Email: supplies@orchidaceousbooks.com.au

AOR 111



Above:
Drawing of
Acineta salazarii
by M. Lopez-Rosas from
Icones Orchidacearum, 2002
(with permission
by Eric Hagsater,
AMO)

Upper Right:
Single flower of
Acineta salazarii
(Type-specimen no.5774)
(with permission
by Gerardo Salazar)

Right:
Type of
Acineta salazarii
(no.5774) from the
herbarium AMO
(with permission
by Eric Hagsater,
AMO)

Sick of writing plant tags?

- THEN WE CAN HELP YOU
- Small Runs of printed tags
- Great prices
- Quick Turn-a-round

apt aussie plant tags

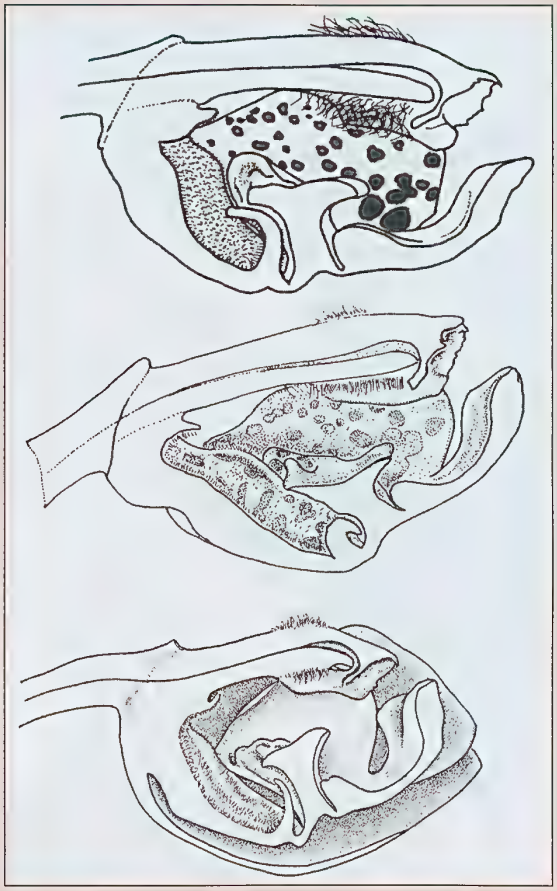
Contact David or Pauline Brewster at
Email: apt@tags.net.au
Web: www.tags.net.au

P.O. Box 1074 Tel: 0401 765 604
Cowes Vic...3922 Fax: (03) 9720 8125

AOR 020

Left:
Cross-section of the lip of (from top) *Acineta barkeri*, *Acineta salazarii*, and *Acineta hagsateri* (with permission by Eric Hagsater and Gerardo Salazar)

Right:
Cross-section of the lip of (from top) *Acineta barkeri*, *Acineta salazarii*, and *Acineta hagsateri* (from the drawings in *Icones Orchidacearum*) (with permission by Eric Hagsater and Gerardo Salazar)



Below:
Line-drawing of *Acineta gymnostele* by Rudolf Schlechter from *Orchis*, 1917

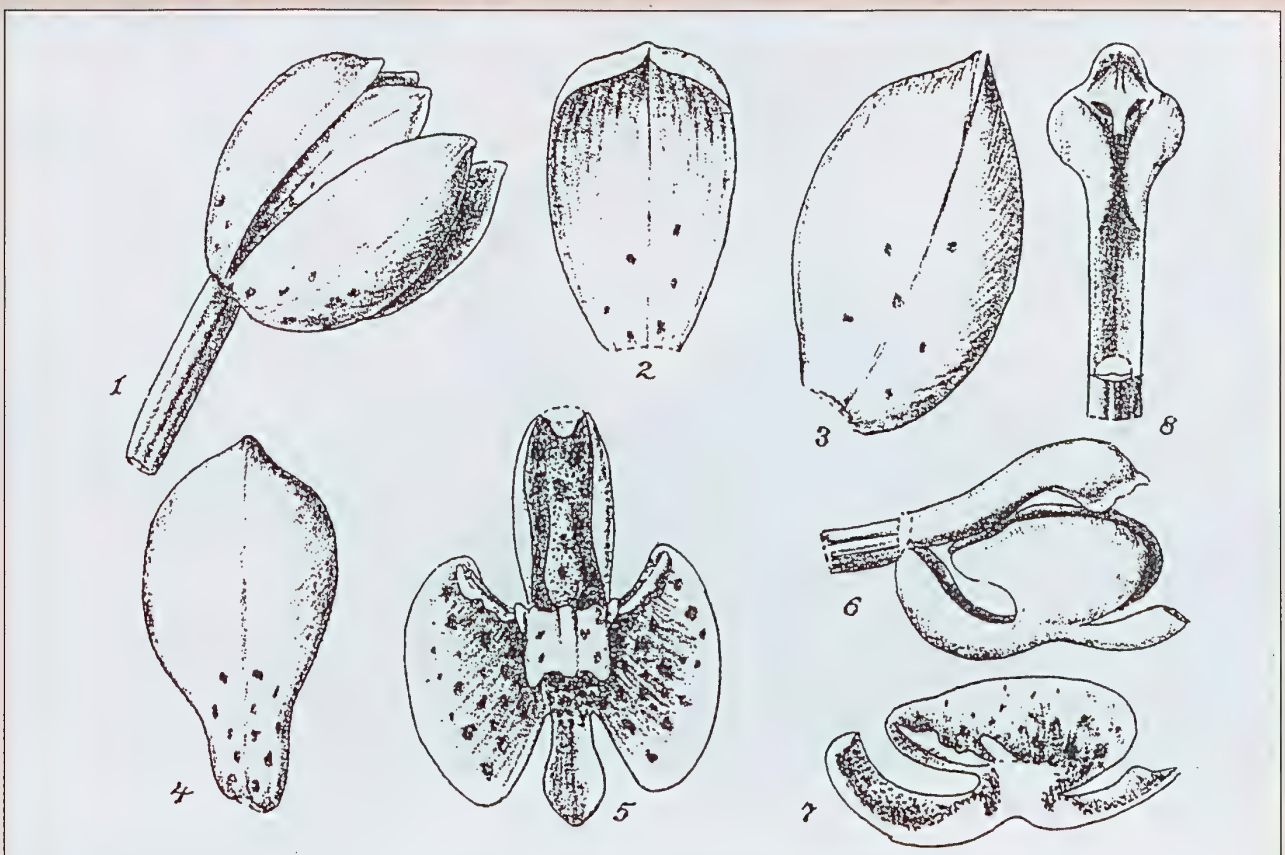


Abb. 16. Acineta gymnostele Schltr.

Above: *Acineta barkeri* from the famous orchid collection of the Herrenhäuser Gärten in Hannover, Germany

Diuris hazeliae, a colourful new species in the *Diuris corymbosa* complex from inland areas of Western Australia

by David L. Jones & Christopher J. French

Abstract

Diuris hazeliae, part of the complex of species surrounding *D. corymbosa* Lindley in Western Australia is described as new.

Key Words

Orchidaceae, *Diuris hazeliae*, *Diuris corymbosa*, new species, Western Australia, Australian flora.

Introduction

Continuing studies in Western Australia into a complex of species surrounding *Diuris corymbosa* Lindley have revealed a number of new taxa. Six new species were described in 1991(Jones 1991) and two more have been named recently (Jones & French 2012, Jones & French 2013). A distinctive inland species with large colourful flowers is described here as new.

Materials and Methods

Descriptions of the new taxon were made from fresh specimens. Unless otherwise indicated, all types of *Diuris* relevant to this study (or photographs thereof), and collections cited, have been seen by us.

Taxonomy

1. *Diuris hazeliae* D.L.Jones & C.J.French, ***sp. nov.*** With affinity to *Diuris corymbosa* Lindley but differing by its much larger, bright yellow flowers with much broader petal laminae, broader dorsal sepal, larger labellum with broader lateral lobes, and strongly flared midlobe.

Type: Western Australia. Tampu, 'Kings Park', property of Hazel & John King, 11 Sept. 1997, *D.L.Jones 15485 & B.E.Jones* (CANB; iso MEL, PERTH).

Illustrations: Page 465, Hoffmann & Brown, third edition (2011) – as *Diuris* sp. 'northern granite'.

Description: *Leaves* two to four, linear to linear-lanceolate, 10-30 cm long, 4-7 mm wide. *Scape* 15-40 cm tall, one-six-flowered. *Pedicels* 10-45 mm long. *Flowers* porrect, 35-55 mm long, 25-35 mm across, bright yellow suffused with red brown, reddish towards the centre of the flower; dorsal side of petal laminae reddish brown with a yellowish central stripe; lateral sepals brown with green tips. *Dorsal sepal* transversely elliptic, 11-15 mm long, 15-20 mm wide; dorsal margins slightly irregular. *Lateral sepals* deflexed, usually crossed and recurved, narrowly oblong, 18-28 mm long, 3-4 mm wide, falcate. *Petals* obliquely erect, divergent, 20-30 mm long; claw linear, 5-7 mm long, straight or curved, blackish; lamina oblong-elliptic, 16-25 mm long, 10-13 mm wide. *Labellum* 8-11 mm long, porrect with a strongly decurved apex, deeply 3-lobed; lateral lobes spreading widely, tips recurved, asymmetrically oblong-ovate, 9-12 mm long, 4.5-7 mm wide, straight; outer margins irregular; mid-lobe broadly cuneate, 7-10 mm long, 9-12 mm wide, narrow at the base then widely flared; anterior margins entire or irregular. *Labellum callus* consisting of a single ridge 5-7 mm long, smooth, centrally yellow surrounded with dark red-brown. *Column* porrect from the end of the ovary, 4.5-5 mm long, 4-5 mm wide. *Column wings* oblanceolate, c. 5 mm long, c. 2 mm wide, cream to yellow with brownish irregularly erose margins. *Anther* narrowly ovate, c. 4.5 mm long, c. 3 mm wide, greenish to brown. *Pollinarium* c. 4 mm long, c. 3 mm wide. *Stigma* cordate to quadrate, c. 3.5 mm long, c. 3 mm wide. *Capsules* not seen.

Distribution and ecology: Widely distributed in a broad band in inland areas between East Yuna across to Paynes Find, Coolgardie and Norseman with easterly occurrences on inland granite rocks north-east of Esperance, east to Mt Andrew. The species occurs in arid zones but grows in sites that are wet in winter and spring. Commonly found on granite outcrops, around the margins of granite sheets and laterised sandstone, and in pockets of aggregations of shale or granitic rubble in gritty loam. The surrounding vegetation is generally shrubland dominated by *Acacia* species, or broombush- or sheoak-dominated woodland. Plants flower freely in the absence of fire. Flowering occurs mid August to September.

Recognition: Characterised by large bright yellow flowers with some reddish markings in the labellum, broad petal laminae and a large labellum with broad lateral lobes and a widely flared midlobe.

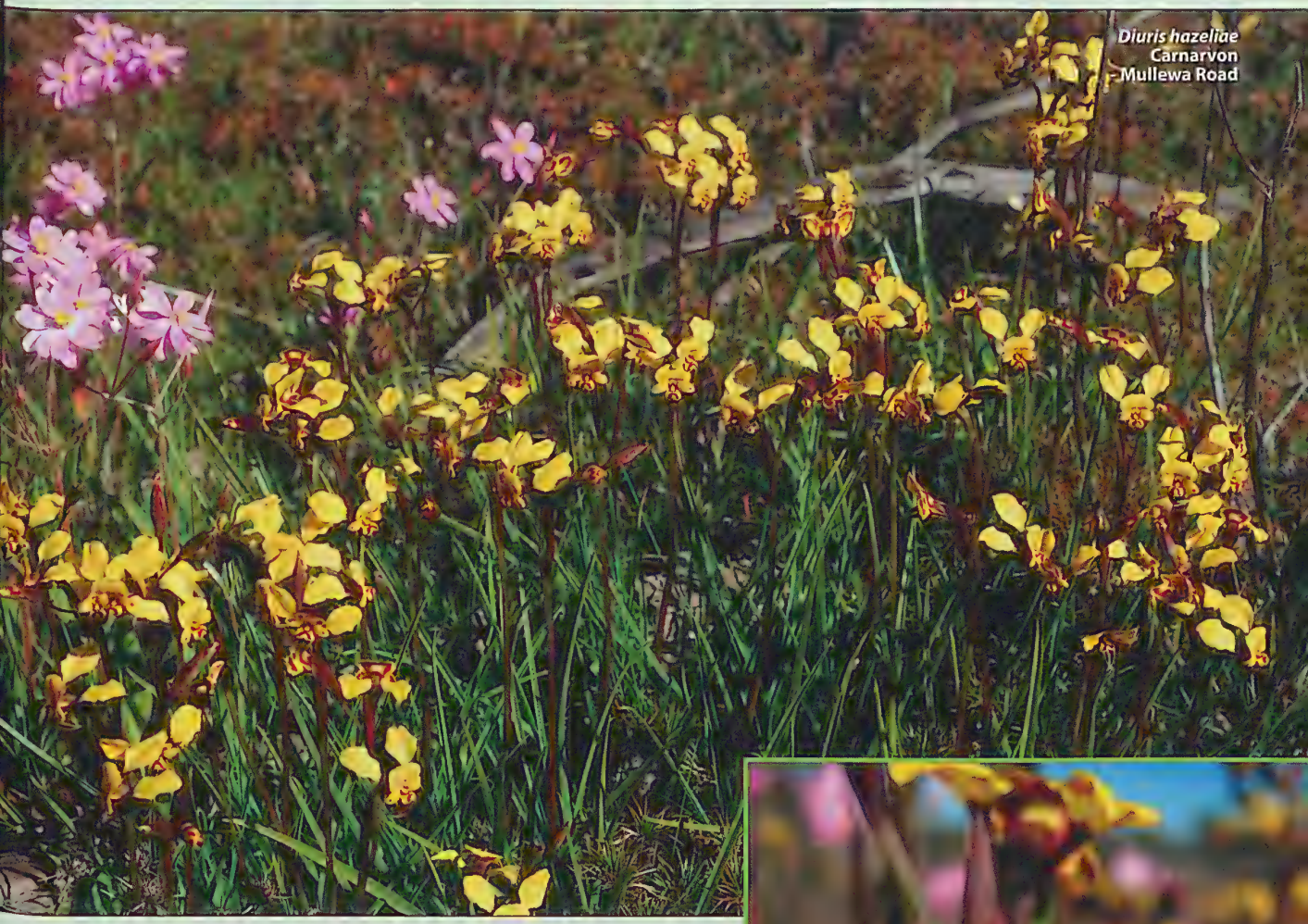
Similar species: *Diuris hazeliae* is probably closest to *D. corymbosa* which has smaller flowers with the laminae of the petals relatively elongated and narrow. It also has a smaller labellum than *D. corymbosa*.

Notes: In the south-east of its range it often grows and flowers with *D. pulchella* but natural hybrids are unknown. This species sometimes has the tag name of *Diuris* sp. 'yellow granite'.

Conservation status: Widespread, common and conserved.

Etymology: Named after Hazel King (1951-), plant collector and conservationist with a special interest in orchids.

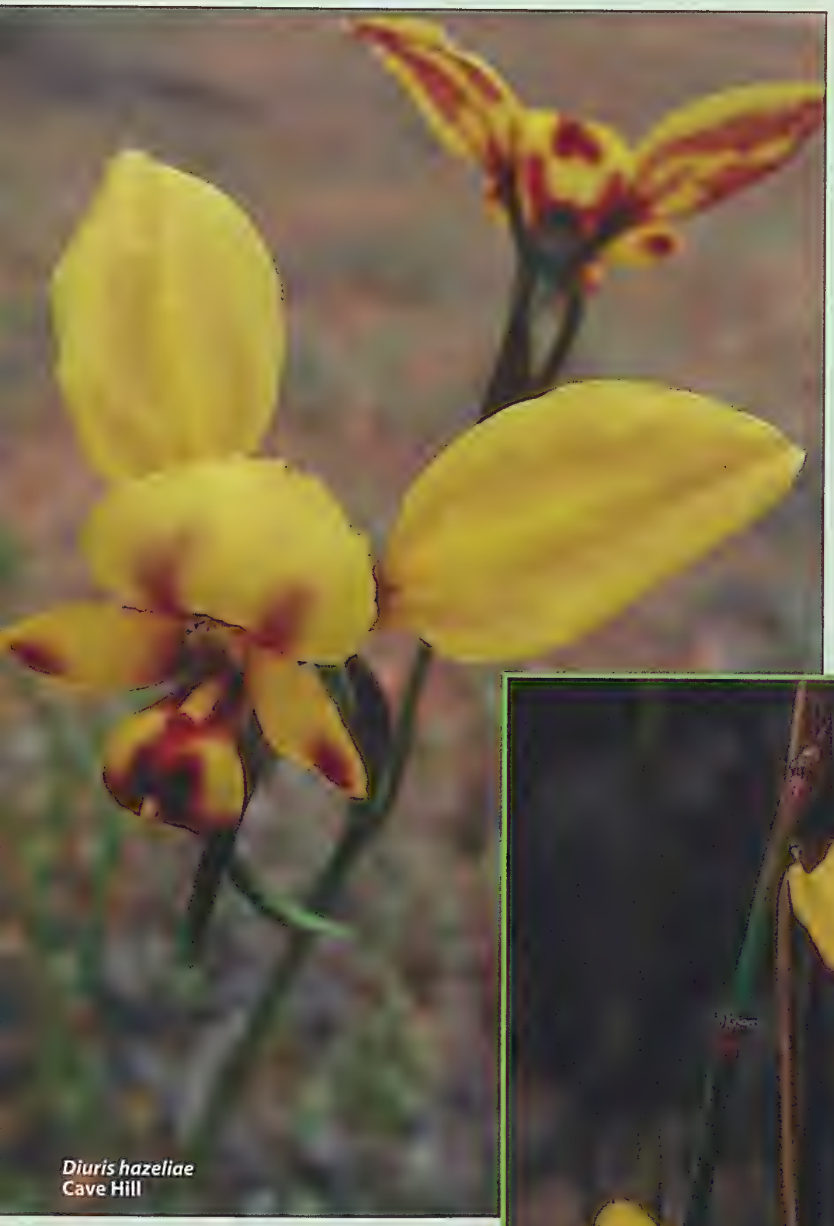
Diuris hazeliae
Camel Soak



Selected specimens: WESTERN AUSTRALIA. Mt Wilgaringa, 11 Sept. 1996, *C.J.French 204a & b* (CANB); Mt Hayward, 17 Sept. 1996, *C.J.French 331* (CANB); Mt Burdett, 18 Aug. 200, *C.J.French 2370* (CANB); Kumarl-Lake King Road, 19.8 km from Coolgardie-Esperance Highway, 19 Aug. 2000, *C.J.French 2384* (CANB); Kumarl-Lake King Road, 1.3 km from road to Moir Rock, 19 Aug. 2000, *C.J.French 2385* (CANB); Boorabbin Rock, Great Eastern Highway, 20 Aug. 2000, *C.J.French 2393* (CANB); Sheoak Hill, 24 Sept. 2004, *C.J.French 5916* (CANB); Wanarra Road, 53 km west of Great Northern Highway, 26 Aug. 2005, *C.J.French 6198* (CANB); Old Karara Road, 2.9 km east of Rabbit Fence, 26 Aug. 2005, *C.J.French 6206* (CANB); Wubin-Morrowa Road, 27 Aug. 2005, *C.J.French 6212* (CANB); Tampu Well, 11 Sept. 1997, *D.L.Jones 15487 & B.E.Jones* (CANB, MEL, PERTH); Billiburning Rock, N of Beacon, 11 Sept. 1997, *D.L.Jones 15497 & B.E.Jones* (CANB, MEL, PERTH).

Acknowledgements

Much appreciation to Anna Monroe for help with specimens at CANB; also the directors and curators at CANB and PERTH for giving us access to specimens. We also thank Jean Egan for preparing the drawing for publication, Mark Clements for access to photos of type specimens, Marion Garrett and Karina Richards for technical assistance. Special appreciation to Garry Brockman, Andrew Brown, Nye Evans, Barbara Jones, Hazel King and the late Bill Jackson for companionship on field trips.



Diuris hazeliae
Cave Hill

Literature Cited

- Hoffmann, Noel & Brown, Andrew (2011). *Orchids of South-west Australia*, third edn. University of Western Australia Press, Nedlands.
- Jones, D.L (1991) New Taxa of Australian Orchidaceae, *Austral. Orch. Res.* 2: 1-208.
- Jones, D.L. & French, C.J. (2012) *Diuris perialla*, a new species from Western Australia with affinities to *Diuris brumalis*, *Aust. Orch. Rev.* 77(5): 25-27.
- Jones, D.L. & French, C.J. (2013) *Diuris refracta*, a new species in the *Diuris corymbosa* complex from Western Australia with affinities to *Diuris recurva*, *Aust. Orch. Rev.* 78(3): 35-41.

David L. Jones
Kalaru, NSW, 2550
Email: dabajones@bigpond.com

Christopher J. French
Bateman, WA, 6150
Email: mail4cjfrench@gmail.com

Diuris hazeliae
Dahjoing Rock

Orchid Species Plus

Specialising in species orchids, flasks and selected hybrids

Mail Order specialists
Open by appointment only

Props: **Bill and Jan Miles**
405 Main Street
Kingston, Victoria 3364
03 5345 6387
orchidspeciesplus@bigpond.com
www.orchidspeciesplus.com.au

AOR 041

Diuris hazeliae
McPherson Rock

ORCHIDACEOUS BOOKS
Suppliers of Fine Orchid Literature

Large selection of new and pre-owned orchid books

Browse and shop at our secure website
www.orchidaceousbooks.com.au

We attend orchid fairs in Brisbane, Sydney and Melbourne

Grahame & Margaret Muller
P.O. Box 4192, Tinana, Qld. 4650
Ph: 07 4122 1251 Fax: 07 4122 4539
Email: books@orchidaceousbooks.com.au

AOR 111

49th TROPICAL QUEENSLAND ORCHID COUNCIL CONFERENCE & SHOW

Hosted by
The Atherton Tableland Orchid Society Inc.
Queen's Birthday Weekend
June 6th to 9th 2014
Early Registration $160.00, closes March 31st 2014
Late Registration $200.00, closes June 2nd 2014
Registration includes ALL meals except breakfast from Friday evening to Sunday evening, and free entry to conference show, lectures and sales areas. (That's 5 Main Meals and 4 Smoko's).
Sellers will be offering an extensive range of orchids, allied plants, and growing aids.
Enquire now for sales sites and further information.
To go on the mailing list, contact:
Conference Secretary, P.O. Box 427, Atherton, Qld, 4883.
Phone: 07 4091 5715 A/H Email: ebatey1@bigpond.com

Diuris hazeliae
Scamp Rock

KIWI ORCHID BARK & RCRA ORCHID CHAR

KIWI ORCHID BARK— HARD, CHUNKY & FREE OF FINES

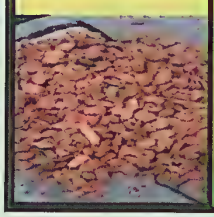
Kiwi Orchid Bark is made from renewable Pinus Radiata bark and is a very clean orchid growing media. RCRA Orchid Char is the best quality char from Charleville in Qld.

KIWI ORCHID BARK available in 10 & 50 litre bags in the following sizes

No 2 ... 3-8mm No 3 ... 8-20mm No 4 ... 20-25mm No 5 ... 25-50mm (50 litre bag only)

RCRA ORCHID CHAR available in 10 litre and 20kg bags in 5mm, 10mm, 15mm, and 20mm uniformly graded sizes.

Stock is available for immediate delivery



For supplies in NSW contact

Kiwi Orchid Bark NSW

Bob Bishop NSW Distributor

Mob 0413 702 335

Email: orchidbark@optusnet.com.au

For supplies in QLD contact

Orchidaceous Supplies

Grahame & Margaret Muller

Mob 0408 076 511

Email: supplies@orchidaceoussupplies.com.au

Diuris hazeliae
Scamp Rock

The Devaluation of the Environment Portfolio in New South Wales

by Alan W. Stephenson

This is an extremely difficult piece to assemble and write as each time I sit down to commence writing, another anomaly raises its ugly head but it all points to the obvious and not understated intentions of a government to rid itself of the problems of having an environment department which actually does something. Unfortunately the environment department, (Office of Environment and Heritage OEH) albeit following current policy, is not sufficiently subservient to certain political and corporate interests. By necessity this article will be political but as politicians are responsible for the policies which determine all we do and how we go about what we do, whether in a state, territory or federally, we are required to work with what we are given. This should not be seen as subservience but an opportunity to comment and improve, particularly with regard to the environmental sector which has a large impact on all keen orchid people.

It has now been over two years since New South Wales elected a conservative government and while the impact was immediate, the overall diminution of the environment department is beginning to become quite noticeable. A very recent change has been to withdraw legal aid funding from the Environmental Defenders Office (EDO) which previously would have supported legal challenges to a range of environmental court cases. The EDO received this funding to provide the government with an alternative point of view in environmental matters as an offset to well funded developer lobby groups such as the Planning Institute of Australia, Urban Development Institute and several similar groups, with the EDO being providing a lone alternative view.

Above: *Pterostylis ventricosa*
(also known botanically as *Speculantha ventricosa*) – only described within the past decade, a rare and endangered species

The first sign of the intent of the new government was the secretion of the former Department of Environment and Climate Change into the Department of Premier and Cabinet where it could be closely controlled. The second change, which actually coincided with the first change, was the non appointment of what I considered to be a very good environmental spokesperson. The then opposition spokesperson had impressed me with statements made during the last couple of years during the opposition period and combined with the deteriorating performance by the previous government; I was looking for a positive change. Unfortunately this proved to be a false impression, with the portfolio losing its independence and a fresh face from the upper house, who had never previously proffered an environmental comment, being presented as the newly named Minister for Environment and Heritage.

Fast forward two years and numerous environmental mishaps later, all without admonition of anyone from the minister down and we now see this department rapidly shredding its workforce. Throughout the environment department, operational levels are being reduced and long-term, well qualified and talented people are going through the process of applying for their jobs. I agree with the first obvious thought that the public service can always be streamlined and improved, however these staff reductions are just part of the often stated line of "reducing the amount of green tape", which is political speak for "clearing the way for developers".

A further indication was the release of a "Green Paper", which is the forerunner to a new NSW Planning Act. The old act was titled "The NSW Environmental Planning and Assessment Act"; however the title of new act has deleted any reference to "environment" and is to be known as simply the NSW Planning Act and this should say something to even casual observers. Added to this was a recent Upper House Committee which undertook an Inquiry into the Management of Public Land in NSW. There were 12 recommendations of the committee including no new National Parks be created and no extensions to existing national parks, an active support for the apiary and inland fishing industries in NSW, which means further clearing to support placement of bee hives, an immediate identification of national park land to log timber and an urgent need for this to occur in the delicate Pilliga region.

In addition to these recommendations was the call in mid-June 2013 by the NSW Deputy Premier to repeal the Native Vegetation Act and Threatened Species Conservation Act

(TSC Act). *"The Government will repeal both the Native Vegetation Act and the Threatened Species Conservation Act, and let farmers clear paddock trees, manage invasive native species and thin native vegetation using self-assessable codes."*

The scientific advice is that clearing of bush on this scale constitutes a grave threat to the biodiversity of NSW.

I am aware there is 1.5M ha of land available for logging in NSW on private farm land, which was once considered safe from this practice under still existing legislation. Much is on land considered too steep to log due to concerns regarding erosion and pollution of waterways, not to mention habitat for a range of flora and fauna, some of which falls under the NSW TSC Act.

These problems are exacerbated by the recent but yet to be implemented decision to introduce hunting into NSW National Parks. The reason for the delay in the introduction of hunting in national parks is that the means of management (safety) are proving more difficult than originally considered and I point to a recent ABC *Four Corners* program as evidence of some of the problems and the belligerence of the person concerned. As if hunting was not sufficient cause for concern there are also plans to log national parks, graze cattle and for the introduction of various mining operations, including coal seam gas, which is yet to be ruled out as a possibility. The Minister for Primary Industry is on record as being in favour of cattle grazing in national parks. This will no doubt impact on many native orchid species and their habitats, plus a range of rare plants and animals.

Of course these factors will be easily self-managed if the OEH becomes redundant and those who use national parks or state forest for bush walks and orchid expeditions will need to take out life insurance before entering what will effectively be a shooting range.

I know what I have written may be an affront to some but it is all factual and I would appreciate some response from others concerned with the environment, specifically our orchid environment as to what may be happening in other states. I am aware Queensland has made severe cuts to its public service and the environmental area is always considered an easy section to reduce numbers and therefore effectiveness. I do not feel any pang of regret with my criticism of most environment ministers, as all I receive in response to what I term fairly strong letters is the usual bureaucratic platitudes and my filing cabinet is full of these.

With the above in mind I strongly urge any environmentally concerned orchid person to express their feelings on these matters to the relevant NSW politician, beginning with your local member of parliament. ■

Alan W. Stephenson
Nowra, NSW
Conservation Officer, Australian Orchid Council
Email: affine@tpg.com.au

Above: ***Diuris aequalis*** – a rare donkey orchid species with a restricted distribution

Below: Caterpillar tracks impact on small-growing fragile endangered species site

Below: Firewood logging in a threatened species habitat

A New Terrestrial Species of Orchidaceae from the Philippines

by Jim Cootes and George Tiong

Abstract: *Ludisia ravanii* Cootes and G. Tiong, is here described as new.

Several years ago a group of us went to a park in Quezon province on the main Philippine island of Luzon. The walk through the forest was quite easy because of a well-defined path, which led to some caves. Walking past the caves was not so easy because the trail became quite rough and indistinct in places. After some time we reached an area of limestone, where many interesting plants grew, including orchids. We observed plants of the slipper orchid *Paphiopedilum hennisianum* (a new locality record for the Philippines) and encountered a terrestrial species, resembling a miniature form of *Ludisia discolor*. There were a number of plants of the *Ludisia* and some of them had inflorescences forming. It was decided to return, several weeks later, and hopefully observe the flowers of this plant. Unfortunately the return trip did not eventuate, because of circumstances beyond our control.

About 2 years ago, the senior author (JC) was sent pictures of a similar plant, but this time from the island of Mindoro, just south of Luzon. These plants were found by Mr. Ravan Schneider, one of our most faithful correspondents, in the mountains behind where he lives. Those photographs are reproduced here.

Ludisia ravanii showing flowering habit from TYPE collection

Ludisia ravanii Cootes and G. Tiong *sp. nov.*

HOLOTYPE: PHILIPPINES, northern Mindoro **NSW971586**

Comparison: *Ludisia ravanii* can only be compared with *Ludisia discolor*, which is the only other species in the genus. *Ludisia ravanii* differs from *Ludisia discolor* by the miniature nature of the plant, the very differently shaped labellum; the shape of the leaves; and the colouration of the flowers.

Growth habit: upright; terrestrial herb to 17 cm tall, including the inflorescence. **Stems:** terete, fleshy, glabrous, 2.5 mm in diameter, tapering gradually; bearing up to 5 leaves; internodes between leaves from 1.5 to 2 cm apart. **Leaves:** petiolate, petiole 5 mm long by 1 mm wide, channelled; leaf blade broadly lanceolate to cordate, with a velvet-like appearance, from 7 to 15 mm long by 5 to 9 mm wide; distinctly three-veined; prominent mid-rib on underside; leaves dark green in colour with off-white venation; basal leaf smallest. **Inflorescences:** upright, bearing up to 7 well-spaced blooms, emerging from between the two uppermost leaves, which are opposite in habit; peduncle and rachis covered with short white hairs; three sheathing bracts below flowers. **Flower colour:** sepals and petals translucent white with reddish-brown longitudinal striping; labellum white; column white with yellow anther cap. **Dorsal sepal:** ovate, obtuse apically, hooded, apex slightly reflexed, 5 mm long by 2.5 mm wide. **Petals:** appear to be adnate to the dorsal sepal, falcate, 5 mm long by 1.2 mm wide. **Lateral sepals:** oblong, 6 mm long by 3 mm wide, apex rounded, slightly concave basally. **Labellum:** three-lobed; mid lobe acutely triangular longitudinally, apically bilobed; mesochile with two semi-circular lobes, which are irregularly notched along the outer margin; hypochile narrow with two sac-like structures; overall 5 mm long by 6 mm wide. **Column:** twisted to the left at an angle of about 45 degrees; short about 1.2 mm long; anther cap with a rostellum about 2 mm long. **Pedicel and Ovary:** terete, 5 mm long by 1.3 mm in diameter; covered with short white hairs.

Habitat and Distribution: *Ludisia ravanii* is endemic to the Philippines and is only known from Quezon province on Luzon, and the island of Mindoro. It grows on the forest floor amongst leaf litter at elevations of between 600 and 1,000 metres. It is also known to occur on limestone outcrops.

Ludisia ravanii – front view of flower

Ludisia ravanii – side view of flower

Etymology: Named in honour of our good friend Mr. Ravan Schneider, who has done much to add to our knowledge of the orchids of the Philippines, and those of northern Mindoro in particular.

Ludisia ravanii – flowering plant in Mindoro

References:

Agoo E.M.G., *et al.* 2003. ***Flora Malesiana: Orchids of the Philippines*** Vol. 1. World Biodiversity Database CD-ROM Series.

Ames O. 1907. Orchidaceae Halconensis. ***Philippine Journal of Science***, 2: 311-337.

Ames O. 1915. ***Studies in the Family Orchidaceae*** Vol. 5, Merrymount Press, Boston, USA.

Barretto G. *et al.* 2011. ***The Wild Orchids of Hong Kong***. Natural History Publications (Borneo), Kota Kinabalu, Malaysia.

Chan C.L., *et al.* 1994. ***Orchids of Borneo*** Vol. 1. The Sabah Society, Kota Kinabalu, Malaysia and Royal Botanic Gardens Kew, England.

Chung Shih-Wen. 2007. ***Orchids of Taiwan*** Vol. 1. Publisher unknown.

Comber J.B. 1990. ***Orchids of Java***. The Bentham-Moxon Trust, Royal Botanic Gardens, Kew, Richmond, Surrey, England.

Comber J.B. 2001. ***Orchids of Sumatra***. Natural History Publications (Borneo), Kota Kinabalu, Malaysia.

Cootes J. 2011. ***Philippine Native Orchid Species***. Katha Publishing, Quezon City, Philippines.

Handoyo F. 2010. ***Orchids of Indonesia***. Indonesian Orchid Society, Jakarta, Indonesia.

Lin Tsan-piao. 1975. ***Native Orchids of Taiwan***. Southern Materials Center, Inc. Taipei 10098, Taiwan.

O'Byrne P. 2001. ***A-Z of South East Asian Orchid Species***. Vol. 1. Orchid Society of South East Asia, Singapore.

O'Byrne P. 2001. ***A-Z of South East Asian Orchid Species***. Vol. 2. Orchid Society of South East Asia, Singapore.

Raskoti B.B. 2009. ***The Orchids of Nepal***. Privately published.

Seidenfaden G. & Wood J.J. 1992. ***The Orchids of Peninsular Malaysia and Singapore***. Olsen and Olsen, Fredensborg, Denmark.

Schlechter R. 1982. ***The Orchidaceae of German New Guinea*** (Reprint). The Australian Orchid Foundation, Essendon, Australia.

Smith J.J. 1908. ***Die Orchideen von Java***. E.J. Brill Leiden, Netherlands.

Valmayor H.L. 1984. ***Orchidiana Philippiniana***. Eugenio Lopez Foundation, Manila, Philippines.

Wood J.J., *et al.* 2011. ***The Orchids of Mount Kinabalu***. 2 vols. Natural History Publications (Borneo), Kota Kinabalu, Malaysia and Royal Botanic Gardens Kew, England. ■

Jim Cootes
Email: jamescootes@optusnet.com.au

George Tiong
Email: gtiong1@hotmail.com

Ludisia ravanii – foliage detail

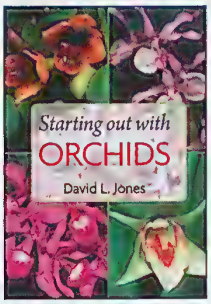
Comparison of *Ludisia discolor* (top) and *Ludisia ravanii* (bottom)

Mail Order bookshop

The publishers of the *Australian Orchid Review* are pleased to offer readers popular orchid books at special discount prices.

Just select the book(s) you require and fill in the details on the form provided.

New titles will be added to the list when they become available.



STARTING OUT WITH ORCHIDS

by David L. Jones

David Jones is arguably one of Australia's most prolific, precise and respected botanical and horticultural authors. The book is divided in two parts. Part One begins with the cultivation chapters, covering Easy Orchids for Beginners, General Cultivation Requirements, Growing Epiphytic Orchids, Growing Terrestrial Orchids, Orchid Pests and Diseases, Housing Your Orchids and Propagating Your Orchids. The information contained within these pages alone is required reading for all beginners through to experienced orchid growers. The text is very easy to read and understand with numerous sound cultivation tips and treatments discussed. There are many excellent and clear line illustrations that help describe terms or highlight diagnostic features. There are over 250 colour photographs.

Part Two discusses the orchids themselves with concise information on each species. They are grouped primarily according to climatic requirements, starting with cool growing orchids progressing to the warm growers, in alphabetical sequence first with terrestrial genera, followed by the epiphytes. Both Australian and exotic species are treated together. For each entry there is specific detailed information on each species, as well as a simple table giving the basic cultivation needs and flowering season. A glossary is also included to explain unfamiliar terms.

240 pages, colour.
210mm x 148mm.
Softcover.

OUR DISCOUNT PRICE $A26.95 (Incl.GST)
was $29.95 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

ORCHID SPECIES OF THE SHOALHAVEN: NSW Australia

by Alan W. Stephenson

Alan Stephenson lives in Nowra and is well placed to give the first botanical treatment of the native orchids of the Shoalhaven region. He has extended the distribution ranges of a number of uncommon and rare species, as well as discovering new taxa. This 68 page book is packed with both information and superb photography, almost exclusively taken by the author. All of the recorded orchid species native to the region are included and illustrated.

The introductory chapters discuss the area covered by this book, the structure of the orchid plants, their natural habitats, parts of an orchid flower, orchid structure and the pollination of orchids. This is followed by the main section of the book that alphabetically lists and discusses each species, with information such as Common Names, Recent Synonyms, Flowering Time in the wild, plus a brief description of the plant, flowers and preferred habitat. There are many terrestrial species fully covered as well as a number of epiphytic and lithophytic genera that are found in the area.

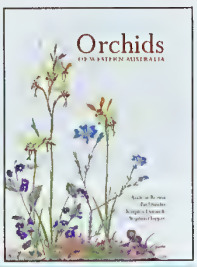
The quality of the printing and colour reproductions are sparking. This is a wonderful field guide that will aid even the most novice naturalist or native orchid enthusiast and confidently assist them in identifying examples they encounter in the field. It represents excellent value, as it also covers many species found naturally along the East Coast of New South Wales.

68 pages,
225 colour photos.
210mm x 148mm.
Softcover.

OUR DISCOUNT PRICE $A19.95 (Incl.GST)
was $25.00 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

ORCHIDS OF WESTERN AUSTRALIA

by Andrew Brown, Pat Dundas, Kingsley Dixon & Stephen Hopper

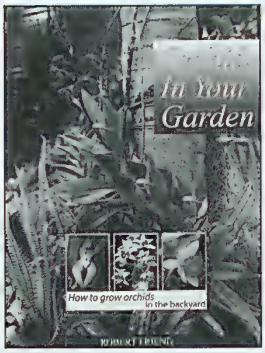


Written by three of Western Australia's most prominent orchidologists and featuring over 200 full-page, colour illustrations by renowned botanical artist Pat Dundas, *Orchids of Western Australia* is the first modern text cataloguing all 409 known species.

This comprehensive resource for hardened enthusiasts and initiates alike features a wealth of information in a single volume – from a detailed introduction to WA orchids to information on each species, including who named them, where they were first collected, their habitat, distribution, flowering period, size and distinguishing features. This book is the culmination of decades of work by WA's foremost experts, each dedicated to the conservation of one of the world's most important regional orchid floras.

420 pages.
325mm x 245mm.
Hardcover.

OUR DISCOUNT PRICE $A54.95 (Incl.GST)
was $89.95 RRP (Incl. GST) PLUS POSTAGE AND HANDLING



ORCHIDS IN YOUR GARDEN

How to grow orchids in the backyard

by Robert Friend

It sounds too good to be true, but orchids are as easy to grow in the backyard as a lawn or a bed of roses. Despite their exotic reputation, the everyday gardener can grow orchids without special pots or greenhouses.

The book shows you haw to introduce orchids into the garden, by attaching them to trees, fixing them on rocks and walls, or planting them in garden beds. With more than 150,000 species and hybrids of orchids in the world, there are plants suitable for every garden.

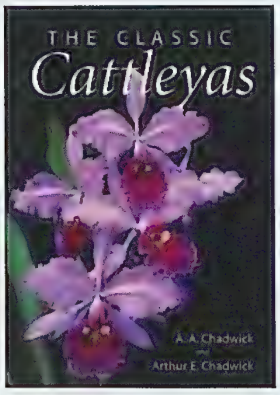
Robert Friend draws on a lifetime's experience with orchids to explain how to choose the right orchid for your climate and how to landscape orchids in different types of gardens. Ranging from tropical to cool climate areas, from large acreages to small courtyard gardens, almost every backyard can enjoy the best of one of nature's wonders.

144 pages.
Colour and B&W.

OUR DISCOUNT PRICE $A19.95 (Incl.GST)
was $22.50 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

THE CLASSIC CATTLEYAS

by A.A. Chadwick and Arthur E. Chadwick



In 1818, William Cattley succeeded in flowering one of the first species of the genus that would bear his name. These first cattleyas are the classic cattleyas, whose form defined the essence of tropical orchids for generations to come. Indeed, the colour of their flowers became known as "orchid." In this helpful and informative book, each classic *Cattleya* species (and cattleya-like *Laelia* species) is described in fascinating detail, and its role in breeding programs is elucidated. All that is required to appreciate and grow the large-flowered cattleyas successfully is included. There are ten line drawings and 162 wonderful colour photographs. Cultivation, humidity and watering, fertilising, propagation, and diagnosing and treating problems are detailed, making this volume valuable for both veteran orchid enthusiasts and those who simply love these beautiful flowers.

252 pages, colour.
260mm x 185mm.
Hardcover.

OUR DISCOUNT PRICE $A49.95 (Incl.GST)
was $89.50 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

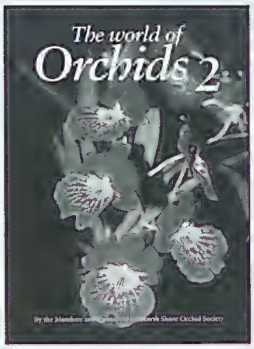
ORCHID: THE FATAL ATTRACTION

by Anne Ronse

The subject of orchids is one close to the heart of many floral designers. some feel it's a privilege to wo[illegible]ith these flowers and plants b[illegible]der how many desig[illegible] investigate the [illegible]m rather than just [illegible]hem. The text by Dr Anne [illegible] is informative and enthusiastic and the photography is superlative! It's so good that the flowers literally drip off the pages capturing the imagination and the heart. If you want something special, are addicted to orchids and want to luxuriate in glorious text and images; this is the book for you.

142 pages.
Colour. Hardcover.

OUR DISCOUNT PRICE $A59.95 (Incl.GST)
was $85.00 RRP (Incl. GST) PLUS POSTAGE AND HANDLING



THE WORLD OF ORCHIDS – 2

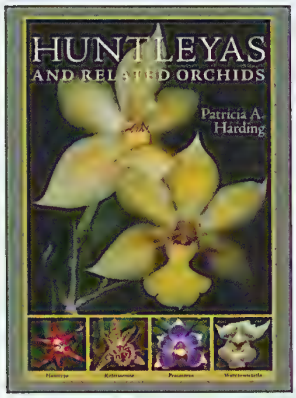
The World of Orchids – 2 has been written by members and friends of the North Shore Orchid Society about orchids grown in Sydney and its environs, and we are indebted to those people for their time and effort.

It has been produced to cover a large range of genera to help not only the novice, but also the experienced grower in their present fields of interest, and to tempt and encourage them to try other genera.

It should be pointed out that the methods of culture used by the authors are those which they themselves have found successful. Growers should try any changes to their own culture gradually and on a few plants first, as orchids respond differently under different conditions.

80 pages.
Colour and B&W.

OUR DISCOUNT PRICE $A9.50 (Incl.GST)
was $11.90 RRP (Incl. GST) PLUS POSTAGE AND HANDLING



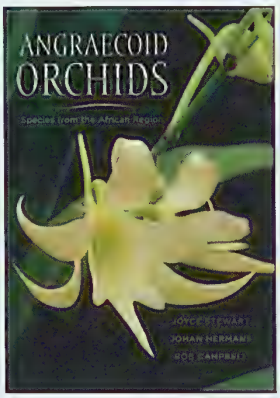
HUNTLEYAS AND RELATED ORCHIDS

by Patricia A. Harding

Revered by avid orchid collectors for its delightful, star-shaped flowers, *Huntleya* is a small group of orchids found low in the forest. *Huntleya* is a small orchid genus that includes fourteen species. They occur in wet cloud forests at medium altitudes of Guatemala, Costa Rica, South America down to Bolivia. The type species *Huntleya meleagris* also occurs in Trinidad. Besides their striking colours — from deep blue to waxy red, royal purple to almost black — flowers of this group are known for their distinctive shapes, patterns, and textures. As appealing as these lovely tropical orchids are, their identification has been confused since the first species was described in the mid-1800s. Recent DNA studies have led to a clearer understanding of relationships and, as a result of this clarity, it is now possible to sort out the taxonomic problems and identify the characteristics that set species apart. In this first book devoted to the *Huntleya* alliance, author Patricia Harding presents evidence from the scientific literature, other growers, and her own experience that will enable orchid enthusiasts everywhere to identify their plants and grow them successfully. Patricia A. Harding is an accredited American Orchid Society judge who has been growing and photographing orchids for three decades.

260 pages, 150 colour photos. Hardcover.

OUR DISCOUNT PRICE $A44.95 (Incl.GST)
was $85.00 RRP (Incl. GST) PLUS POSTAGE AND HANDLING



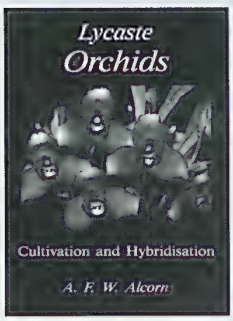
ANGRAECOID ORCHIDS: Species from the African Region

by Joyce Stewart, Johan Hermans, and Bob Campbell

These so-called 'Jewels of Africa' with their sparkling flowers, distinctive growth habit and floriferous nature are much prized and this account, the first to include the Angraecoid orchids of both Africa and Madagascar, is long awaited. It brings together, in a single volume, descriptions of all 690 species in this intriguing group of orchids and will be the essential reference for all Angraecoid orchid enthusiasts for years to come. Including such horticulturally important genera as *Angraecum*, *Aeranthes*, *Aerangis* and *Jumellea*. Stewart, Herman and Campbell have all spent time in various parts of eastern and southern Africa and precise ecological information relating to habitat, altitude preferences and flowering season of individual plants will be particularly helpful to growers. The diagnostic features of each genus are illustrated and over half the species are accompanied by exquisite photographs taken in both wild habitats and in cultivation.

432 pages,
290 colour photos.
185mm x 265mm.
Hardcover.

OUR DISCOUNT PRICE $A59.95 (Incl.GST)
was $89.95 RRP (Incl. GST) PLUS POSTAGE AND HANDLING



LYCASTE ORCHIDS - Cultivation and Hybridisation

by A.F.W. Alcorn

Lycaste orchids are easy to grow, and they produce flowers that range from the beautiful to the bizarre. No book previously has provided detailed cultural requirements of the Lycaste, and this book should fill that gap, and encourage new growers to take up the cultivation of this beautiful genus. A section on hybridising contains valuable information on inheritance and genetics that will benefit any hybridiser, not just the grower of Lycastes, as well as helpful hints on how to avoid pitfalls in your hybridising program. Michael Hallett, a friend of Fred Alcorn for a number of years, co-wrote this book with Fred and has completed it posthumously. He has a background in genetics, research and botany, and a passion for plants, [illegible] especially orchids.

237 pages.
Colour and B&W.

OUR DISCOUNT PRICE $A15.00 (Incl.GST)
was $28.55 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

MASDEVALLIAS: Gems of the Orchid World

by Mary E. Gerritsen and Ron Parsons

For the species orchid enthusiast, cool to intermediate orchid grower, or anyone simply "mad about Masdevallias," this is a first complete reference to these collectible new world orchids. An inspiring tribute to their beauty and a practical guide to their care, the book offers detailed advice on all aspects of culture. For those enthusiasts who are up to a challenge, chapters on propagating, showing, and registering Masdevallias are also included. Ron Parsons is one of the finest nature photographers in the world and has an encyclopaedic knowledge of species orchids, with the genus *Masdevallia* being one of his favourites.

300 pages,
149 colour photos.
190mm x 255mm.
Hardcover.

OUR DISCOUNT PRICE $A49.95 (Incl.GST)
was $69.95 RRP (Incl. GST) PLUS POSTAGE AND HANDLING

Australian Orchid Review

Mail Order bookshop

order form

Postage Zones

A Australia
(Quoted A$ Dollars)

All Overseas Orders
(Please contact us for a Postal Quote)

Item & Title	Postage Zone	Recommended Retail Price (RRP)	Our Discount Price	Plus Postage & Handling	Total Price	Number of Copies	Grand Total $
1. Starting out with Orchids	A	= A$29.95 (Incl. GST)	A$26.95 + (Incl. GST)	A$7.00	= A$33.95		
2. Orchid Species of the Shoalhaven: NSW Australia	A	= A$25.00 (Incl. GST)	A$19.95 + (Incl. GST)	A$3.00	= A$22.95		
3. Orchids of Western Australia	A	= A$89.95 (Incl. GST)	A$54.95 + (Incl. GST)	A$12.00	= A$66.95		
4. Orchids In Your Garden	A	= A$22.50 (Incl. GST)	A$19.95 + (Incl. GST)	A$7.00	= A$26.95		
5. The Classic Cattleyas	A	= A$89.50 (Incl. GST)	A$49.95 + (Incl. GST)	A$12.00	= A$61.95		
6. Orchid: The Fatal Attraction	A	Sold out	A$59.95 + (Incl. GST)	A$12.00	= A$71.95		
7. Huntleyas and Related Orchids	A	= A$85.00 (Incl. GST)	A$44.95 + (Incl. GST)	A$12.00	= A$56.95		
8. Lycaste Orchids – Cultivation and Hybridisation	A	= A$28.55 (Incl. GST)	A$15.00 + (Incl. GST)	A$7.00	= A$22.00		
9. The World of Orchids – 2	A	= A$11.90 (Incl. GST)	A$9.50 + (Incl. GST)	A$3.00	= A$12.50		
10. Angraecoid Orchids: Species from the African Region	A	= A$89.95 (Incl. GST)	A$59.95 + (Incl. GST)	A$12.00	= A$71.95		
11. Masdevallias: Gems of the Orchid World	A	= A$69.95 (Incl. GST)	A$49.95 + (Incl. GST)	A$12.00	= A$61.95		
					TOTAL ORDER	$	

Australian Orchid Review

For six, twelve or eighteen issues of Australian Orchid Review, fill in the form below and post in now together with your payment.

CUT ALONG DOTTED LINES *Turn over to complete order details*

CUT ALONG DOTTED LINES

Please tick ☐ Renewal ☐ New ☐ Address Change

Send to *Australian Orchid Review*, Hills Orchid Publishing Pty Ltd, PO Box 4812, North Rocks, NSW 2151 Australia
Phone: 0433 422 792 Email: sales@australianorchidreview.com.au

	1YEAR (6 issues)	*2YEARS (12 issues)*	*3YEARS (18 issues)*
☐ **Australia**	☐ **A$49.60** (Includes GST)	☐ **A$95.75** (Includes GST)	☐ **A$141.00** (Includes GST)
☐ **NZ Airmail**	☐ **NZ$77.00**	☐ **NZ$152.00**	☐ **NZ$225.00**
☐ **US Airmail**	☐ **US$88.00**	☐ **US$162.00**	☐ **US$230.00**

Enclosed is my cheque for_____ (Payable to Australian Orchid Review)

or charge my Mastercard ☐ Visa ☐

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Card expiry date ☐☐☐☐

*Mr/Mrs/Ms _____ Signature _____

Address _____

_____ Postcode _____ Telephone ( ) _____

All International Payments by Credit Card ONLY. Australian Credit Card subscriptions may be telephoned to 0433 422 792.

SUBSCRIBE NOW

how to order mail order form

CUT ALONG DOTTED LINES

SEND TO:

Australian Orchid Review

MAIL ORDER:
PO Box 4812, North Rocks,
NSW 2151 Australia

PHONE ORDER:
0433 422 792

EMAIL:
sales@australianorchidreview.com.au

PHONE AND EMAIL ORDERS FOR CREDIT CARD USE ONLY

Enclosed is my cheque for $ (Payable to Australian Orchid Review)

or charge my Mastercard ☐ Visa ☐

Card expiry date

*Mr/Mrs/Ms _____ Signature _____

Address _____

Country _____ Postcode _____ Telephone ( ) _____

cut here for mail order bookshop

cut here for australian orchid review subscription

AFFIX POSTAGE STAMP HERE

AUSTRALIAN ORCHID REVIEW
PO BOX 4812
NORTH ROCKS
NSW 2151 AUSTRALIA

Australian Orchid Review

All advertising bookings and enquiries should be directed to: Caitlin Hoolahan ☎ 0433 422 792 Fax: (02) 9221 4242
Email: sales@australianorchidreview.com.au *or* David Banks ☎ 0412 123 036 Email: david@hillsdistrictorchids.com

ADVERTISEMENT SIZES

Magazine Page size: 275mm deep x 210mm wide
Magazine Page with Bleed: 285mm H x 220mm W *(5mm bleed all round)*
Full Page Ad: 246mm H x 186mm W
Two Thirds Ad: 246mm H x 122.66mm W
Half Page Ad: *Vertical* 246mm H x 91mm W; *Horizontal* 121mm H x 186mm W
One Third Ad: *Vertical* 246mm H x 59.33mm W; *Horizontal* 121mm H x 122.66mm W
One Sixth Ad: *Vertical* 121mm H x 59.33mm W; *Horizontal* 58.5mm H x 122.66mm W
One Twelfth Ad: 58.5mm H x 59.33mm W

ADVERTISEMENT MATERIAL REQUIREMENTS

ELECTRONIC: Material on disk or emailed is to be formatted to Macintosh. It should be supplied as a High Res PDF file (this is the preferred file format) at the required dimensions as listed above (created using Adobe Acrobat® Distiller v5.0 and above [we use v9.0], all fonts embedded, colour CMYK press ready - we can supply Distiller Options/Settings if required). Artwork *can* be supplied in the 'native' file format (ie. if it has been created in Adobe Indesign®, Adobe Photoshop® or Adobe Illustrator® [CS/CS2/CS3/CS4 or CS5], however please ZIP [compress] ALL files into one folder (including the Indesign/Photoshop/Illustrator file, and all fonts and images used) before sending via email, to prevent font corruption.
All graphics are to be high resolution (minimum 300dpi) in either TIFF or EPS format. All font sets to be included.
Please supply colour laser proof of material on disk for internal colour checks. Separate high resolution graphic files should also be supplied for documents created in MS Word that contain embedded graphics please.

ADVERTISING RATES AS AT August 2013

SIZE	ONE-OFF ISSUE RATE	CONTRACT ANNUAL RATE - 6 issues
1/12th	$150	$99
1/6th	$275	$175
1/3rd	$500	$350
1/2	$650	$550
Full page	$1000	$800
Inside cover	$1250	$1000
Back cover	$1500	$1250

PLEASE NOTE: Advertising rates above are based on complete print-ready artwork for advertisement being supplied, at the size and specifications required (also listed above).
An additional charge is added where typesetting and artwork is required to be prepared. We use and recommend Nadalie from *'Red Diamond Design'* for all your typesetting / artwork / design requirements for your advertising.

TYPESETTING AND ARTWORK RATES AS AT August 2013

(If complete print-ready artwork for advertisement is supplied, these charges do not apply)

1/12th page advertisement **$50**
1/6th page advertisement **$60**
1/3rd page advertisement **$70**
1/2 page advertisement (includes 1/2 page covers)..... **$100**
Full page advertisement (includes full page covers).... **$150**

PLEASE NOTE: If typesetting and artwork is required to be prepared for the advertisement, the fee for this will be invoiced separately to the 'Advertising Rate fee', and payment of this fee is to be made to *'Red Diamond Design'*.

Please contact Nadalie at *'Red Diamond Design'* - Email: rdd@netspace.net.au or ☎ 0424 141 637

08/13

CONTRACT ADVERTISERS PLEASE NOTE: REPEAT COPY WILL BE USED WHERE CHANGES ARE NOT IN HAND BY DUE DEADLINES

Australian Orchid Review

Editor:
David P. Banks
Email: david@hillsdistrictorchids.com

Address editorial to:
The Editor, Australian Orchid Review,
39 Carole Street, Seven Hills, NSW 2147 Australia
☎ (02) 9674 4720
Email: david@hillsdistrictorchids.com

To join an orchid society contact these secretaries

New South Wales
Veronica Clowes
P.O. Box 5396, Chullora NSW 2190
Phone: (02) 9649 2719
Email: secretaryosnsw@yahoo.com.au

Queensland
Maree Illingworth
P.O. Box 126BC, Brown Plains 4118
Phone: (07) 3800 3213
Email: r.millingworth@uq.net.au

Western Australia
Murray Baker
c/- 58 Gladstone Road, Leeming WA 6149
Phone: (08) 9310 2800
Email: murray.baker@iinet.net.au

Victoria
Diane Sharam
1 Tynan Street, West Preston, 3072
Phone: (03) 9478 9764

Julie Forrest
Phone: (03) 5978 6045
Email: efo28308@bigpond.net.au

South Australia
Coralie Hills
G.P.O. Box 730, Adelaide 5001
Phone: (08) 8721 3213

Don Higgs
P.O. Box 134, Myponga SA 5202
Phone: (08) 8558 6247
Email: jhiggs@internode.on.net

Tasmania
Jan Dicker
G.P.O. Box 467, Hobart 7001
Phone: (03) 6247 9636
Email: jtdicker@bigpond.com

Northern Territory
Tammie Coyne
P.O. Box 38493, Winnellie 0821

To join a Cymbidium Club in your state, contact:

Cymbidium Club of Australia Inc.
Secretary, Judith Brooks
51 Chamberlain Road, Padstow Heights NSW 2211
Phone: (02) 9773 9197
Email: jahamilton.17@btinternet.com

The Cymbidium Orchid Society of Victoria Inc.
Secretary, Jenifer Robinson
54 Worthington Road, Devon Meadows VIC 3977
Phone: (03) 5998 2226

Cymbidium Orchid Club of South Australia Inc.
Secretary, Jeanne Hall
18 Coorilla Avenue, Glenelg North SA 5045
Phone: (08) 8294 5562

The Cymbidium Orchid Club of Western Australia Inc.
Secretary, Alice Lang
20 Urch Road, Kalamunda WA 6076
Phone: (08) 9257 1056

Publisher
HILLS ORCHID PUBLISHING PTY LIMITED
ABN 83 150 020 189
39 Carole Street, Seven Hills NSW 2147 Australia
Phone: 0433 422 792 or 0412 123 036

Printed by bluestar PRINT

While the Proprietors of the *Australian Orchid Review* endeavour to assure the reliability of advertising and editorial, neither the Proprietor of the *"Australian Orchid Review"* nor the Editor can assume responsibility for the advice or transaction between advertisers and readers. The opinions and recommendations that may appear in this publication regarding the selection and use of specific plant-care products, including but not limited to pesticides, fungicides and herbicides, are those of the individual authors, and not those of the *Australian Orchid Review*, which neither adopts nor endorses such opinions and recommendations and disclaims all responsibility for them. When selecting and using such products, readers should seek and obtain the advice of the manufacturer and of responsible government departments.

ADVERTISERS INDEX

49th Tropical Queensland Orchid Council Conference & Show 51
American Orchid Society 6
Aranbeem Orchids 9
Aussie Plant Tags 44
Aussie Shade & Hothouses 19
Australian Orchid Foundation 13
Burleigh Park Orchid Nursery 10
Cedarvale Orchids 17
C-Mac Industries (Aust.) 9
Colin Campbell Chemicals 19
Dark Star Orchids 11
David Keanelly Orchids 16
Easy Orchids ..... 13, BC
Hills District Orchids ..... IFC
Horticultural Courses 5
Kiwi Orchid Bark 52
Mallee Phallies 14
Miriam Ann Orchids 6
Mount Beenak Orchids 27
Nicky's Slippers 23
Orchid Pot Company, The 8
Orchid Species Plus 50
Orchidaceous Books 51
Orchidaceous Supplies 43
Orchids North 18
Peter's Glen Shadehouses 16
Queensland International Orchid Fair 27
Red Diamond Design 16
Retina Australia 8
Rock Lily Man, The 23
Tinonee Orchids 41
Western Orchid Laboratories 27

Editorial copy:

Articles for publication and consideration should be sent to:
AOR Editor, David P. Banks, 39 Carole Street, Seven Hills, NSW 2147
Email: david@hillsdistrictorchids.com

All other correspondence to:
AOR Publisher, Hills Orchid Publishing Pty Ltd, PO Box 4812, North Rocks, NSW 2151
☎ 0433 422 792

Australian Orchid Review

Advertisers:

Deadline for advertising copy for the
December 2013 – January 2014 issue is Monday, 21 October, 2013

All advertising bookings and enquiries should be directed to:
Caitlin Hoolahan ☎ 0433 422 792 Fax: (02) 9221 4242 or
Email: sales@australianorchidreview.com.au or
David Banks ☎ 0412 123 036 Email: david@hillsdistrictorchids.com

Subscriptions:

See page 61 for Subscription information

***Dendrobium jonesii* from Mount Lewis, Queensland (photo: D.P. Banks)**

Dendrobium adae **is a delightful species from the Wet Tropics of North Queensland. This is a typical colour example from the Herberton Range with fine shape** ***(photo: Michael Harrison)***

AUSTRALIA TO MAKE ITS MARK AT W.O.C. 21

LIMITED SEATS AVAILABLE!

YOUR CHANCE TO EXPERIENCE ABSOLUTE LUXURY

Murray and Jean Shergold announce

THE AFRICAN GRAND ORCHID SAFARI

8th - 26th September 2014

After 20 years of tours, ***Easy Orchids*** have called on their extensive experience in Africa to plan a luxury ***19 day Grand Orchid Safari*** for 2014.

In conjunction with Casino Travel Shoppe, ***Easy Orchids*** are excited to offer the

BEST ORCHID TOUR EX AUSTRALIA EVER!

- All airfares included in price • All entry fees included • Some meals included
- 5 star hotel in Johannesburg • Visit Entabeni 5 star luxury Game park
- Visit WORLD FAMOUS Chobe Game lodge in Kasane, Botswana • See Africa's big 5 close up!
- Whale watching at Hermanus, South Africa • Table Mountain by cable car included
- Spend 2 days at 21st World Orchid Conference in Johannesburg as full registrants
- Spend a whole day at Kirstenbosch Botanic Gardens in Cape Town, South Africa
- All Airtravel by South African Airlines in conjunction with Qantas... the best of everything!
- All this and more included, as is luxury air conditioned coach travel from start to finish
- Full action packed itinerary at **www.easyorchids.com**

Bookings open now! Lets break the record! ***Easy Orchids*** *escorted 79 travellers to the World Orchid Conference in Kuala Lumpur. Join the fun, experience the luxury.*

Book now for South Africa, Zimbabwe and Botswana in 2014! *Don't miss out!*

Memories that stay forever, Easy Orchids Tours. Experts in Africa!

CASINO TRAVEL SHOPPE
109 Barker Street, Casino NSW 2470
Ph: 02 6662 6255 Fax: 02 6662 6070
casino.travel@bigpond.com
www.casinotravelshoppe.com.au
Licence 2TA5182

For more information:

EASY ORCHIDS
3 Sussex Street, Woodburn NSW 2472
Ph: 02 6682 2635 Fax: 02 6682 2605
sales@easyorchids.com
www.easyorchids.com
A.B.N. 99 214 227 028